

Federal Operating Permit

Until such time as this permit is reopened and revised, modified, revoked, terminated or expires, the permittee is authorized to operate in accordance with the terms and conditions contained herein. This permit is issued under the authority of Title 10.1, Chapter 13, §10.1-1322 of the Air Pollution Control Law of Virginia. This permit is issued consistent with the Administrative Process Act, and 9 VAC 5-80-50 through 9 VAC 5-80-300 of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution of the Commonwealth of Virginia. Authorization to operate a Stationary Source of Air Pollution as described in this permit is hereby granted to:

Permittee Name:	Virginia Electric and Power Company
Facility Name:	Chesterfield Power Station
Facility Location:	End of Coxendale Road (Route 615) Chester, VA 23831
Registration Number:	50396
Permit Number:	PRO-50396

November 3, 2003

Effective Date

October 18, 2005

Amended Date

November 3, 2008

Expiration Date

Director, Department of Environmental Quality

Signature Date

Table of Contents, 2 pages; Permit Conditions, 58 pages

Table of Contents

I. FACILITY INFORMATION.....	4
II. EMISSION UNITS	5
III. THE FUEL BURNING EQUIPMENT REQUIREMENTS: BOILERS – (EMISSION UNIT ID# ES-3, ES-4, ES-5, ES-6).....	8
A. LIMITATION REQUIREMENTS FOR EMISSION UNIT ID # ES-3, ES-4, ES-5, ES-6	8
B. MONITORING AND RECORDKEEPING REQUIREMENTS FOR EMISSION UNIT ID # ES-3, ES-4, ES-5, ES-6	16
C. TESTING REQUIREMENTS FOR EMISSION UNIT ID # ES-3, ES-4, ES-5, ES-6	17
D. REPORTING REQUIREMENTS FOR EMISSION UNIT ID # ES-3, ES-4, ES-5, ES-6.....	17
IV. FUEL BURNING EQUIPMENT REQUIREMENTS: TURBINES (EMISSION UNIT ID # ES – 7A, B, C AND ES-8A, B, C).....	18
A. LIMITATIONS FOR EMISSION UNIT ID # ES-7A, B, C AND ES-8A, B, C	18
B. MONITORING REQUIREMENTS FOR EMISSION UNITS ID # ES-7A, B, C AND ES-8A, B, C	21
C. RECORDKEEPING REQUIREMENTS FOR EMISSION UNITS ID # ES-7A, B, C AND ES-8A, B, C.....	21
D. TESTING REQUIREMENTS FOR EMISSION UNITS ID # ES -7A, B, C AND ES-8A, B, C.....	22
E. REPORTING REQUIREMENTS FOR EMISSION UNITS ID # ES- 7A, B, C AND ES-8A, B, C	22
V. PROCESS EQUIPMENT REQUIREMENTS: COAL HANDLING EQUIPMENT – (EMISSION UNIT ID# ES-9A, ES-9C, ES-9D , ES-9E	23
A. LIMITATIONS FOR UNITS ES-9A, ES-9C, ES-9D, ES-9E	23
B. MONITORING REQUIREMENTS FOR EMISSION UNITS ID # ES-9A, ES-9C, ES-9D, ES-9E.....	25
C. RECORDKEEPING FOR EMISSION UNITS # ID ES-9A, ES-9C, ES-9E	26
D. TESTING REQUIREMENTS FOR EMISSION UNITS ID # ES –9A, ES-9C, ES-9D, ES-9E.....	26
E. REPORTING EMISSION UNITS # ID ES-9A, ES-9C, ES-9E	27
VI. PROCESS EQUIPMENT REQUIREMENTS: FLYASH REUTILIZATION (EMISSION UNIT# ES-10) 27	
A. LIMITATIONS FOR UNIT ES-10	27
B. MONITORING, RECORDKEEPING AND TESTING REQUIREMENTS FOR EMISSION UNITS ID# ES-10.....	29
C. REPORTING FOR EMISSION UNIT # ES-10	29
VII. PROCESS EQUIPMENT REQUIREMENTS: EMERGENCY COMBUSTION TURBINES, DIESEL GENERATOR, OIL STORAGE TANKS (EMISSION UNITS # IS-1, IS-2, IS-3, IS-5)	30
A. LIMITATIONS, MONITORING, RECORDKEEPING, TESTING AND REPORTING REQUIREMENTS FOR UNITS # IS-1, IS-2, IS-3, IS-5	30
VIII. PROCESS EQUIPMENT REQUIREMENTS: SELECTIVE CATALYTIC REDUCTION INSTALLATION – POLLUTION CONTROL PROJECT (EMISSION UNITS # ES-4, ES-5, ES-6)	32
A. LIMITATIONS, MONITORING, RECORDKEEPING, TESTING AND REPORTING REQUIREMENTS FOR UNITS # ES-4, ES-5, ES-6.....	32
IX. FACILITY WIDE CONDITIONS.....	36
A. LIMITATIONS	36
B. MONITORING AND RECORDKEEPING	37
C. TESTING	38

X.	INSIGNIFICANT EMISSION UNITS.....	38
XI.	PERMIT SHIELD & INAPPLICABLE REQUIREMENTS.....	40
XII.	GENERAL CONDITIONS.....	40
A.	FEDERAL ENFORCEABILITY	40
B.	PERMIT EXPIRATION	41
C.	RECORDKEEPING AND REPORTING	42
D.	ANNUAL COMPLIANCE CERTIFICATION	43
E.	PERMIT DEVIATION REPORTING.....	44
F.	FAILURE/MALFUNCTION REPORTING	44
G.	SEVERABILITY	45
H.	DUTY TO COMPLY	45
I.	NEED TO HALT OR REDUCE ACTIVITY NOT A DEFENSE	45
J.	PERMIT ACTION FOR CAUSE	45
K.	PROPERTY RIGHTS	46
L.	DUTY TO SUBMIT INFORMATION.....	46
M.	DUTY TO PAY PERMIT FEES.....	47
N.	FUGITIVE DUST EMISSION STANDARDS	47
O.	STARTUP, SHUTDOWN, AND MALFUNCTION	48
P.	ALTERNATIVE OPERATING SCENARIOS	48
Q.	INSPECTION AND ENTRY REQUIREMENTS	48
R.	REOPENING FOR CAUSE	49
S.	PERMIT AVAILABILITY	49
T.	TRANSFER OF PERMITS.....	49
U.	MALFUNCTION AS AN AFFIRMATIVE DEFENSE.....	50
V.	PERMIT REVOCATION OR TERMINATION FOR CAUSE.....	51
W.	DUTY TO SUPPLEMENT OR CORRECT APPLICATION.....	51
X.	STRATOSPHERIC OZONE PROTECTION	51
Y.	ACCIDENTAL RELEASE PREVENTION.....	51
Z.	CHANGES TO PERMITS FOR EMISSIONS TRADING	51
AA.	EMISSIONS TRADING	52
BB.	OPERATIONAL FLEXIBILITY	52
XIII.	STATE-ONLY ENFORCEABLE REQUIREMENTS.....	52
XIV.	PHASE II ACID RAIN ALLOWANCES AND REQUIREMENTS.....	52
XV.	NOX ALLOWANCE BUDGET TRADING PERMIT REQUIREMENTS	53
A.	GENERAL CONDITIONS	53
B.	STANDARD REQUIREMENTS.....	54
C.	RECORDKEEPING AND REPORTING REQUIREMENTS.	56
D.	TESTING	57
E.	LIABILITY	57
F.	EFFECT ON OTHER AUTHORITIES.	58

I. Facility Information

Permittee

Virginia Electric and Power Company
5000 Dominion Boulevard
Glen Allen, VA 23060

Responsible Official

John Ely
Station Director

Facility

Chesterfield Power Station
End of Coxendale Road (Route 615)
Chester, VA 23831

Contact Person

Pamela F. Faggert
Vice President and Chief Environmental Officer
(804) 273-3467

AIRS Identification Number: 51-041-0002

Facility Description: SIC Code 4911 – Electrical Power Generation. The Chesterfield Power Station burns fossil fuel for the generation of electrical power. The facility operates four pulverized coal, tangentially-fired dry bottom boilers (ES-3, ES-4, ES-5, ES-6) and two General Electric combined cycle combustion turbines (ES-7, ES-8). Three of the boilers, ES-3, ES-4 and ES-6, burn coal and no. 2 fuel oil. Boiler ES-5 burns coal, no. 2 fuel oil and waste oil. The two combustion turbines ES-7, ES-8, burn natural gas, no. 2 fuel oil and coal gas. Each boiler has an electrostatic precipitator (ESP) to control particulate emissions and the facility is installing selective catalytic reduction (SCR) equipment on units ES-4, ES-5 and ES-6 to control nitrogen dioxide (NOx) emissions. The combustion turbines use steam injection to control NOx emissions. The facility also operates coal and ash handling systems, fuel oil storage tanks and emergency diesel generators.

II. Emission Units

Equipment to be operated consists of:

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
Fuel Burning Equipment: Boilers							
ES-3A	EP-3	Combustion Engineering Tangentially Fire Coal Boiler equipped with Startup Burners (1952)	1155 x 10 ⁶ Btu/hr	Environmental Elements Corporation electrostatic precipitator, Staged Coal Combustion Burners	CD-3	PM-10, NOx	State Operating Permit February 9, 2001; Acid Rain Permit December 10, 1998
ES-4A	EP-4	Combustion Engineering Tangentially Fire Coal Boiler equipped with Startup Burners (1960)	1761x 10 ⁶ Btu/hr	American Air Filter electrostatic precipitator, Staged Combustion Coal Burners, SCR (under construction)	CD-4	PM-10, NOx	State Operating Permit February 9, 2001; Acid Rain Permit December 10, 1998
ES-5A	EP-5	Combustion Engineering Tangentially Fire Coal Boiler equipped with startup burner (1964)	3604x 10 ⁶ Btu/hr	UOP- Air Filter Products Divisions electrostatic precipitator, Staged Combustion Coal Burners, SCR (under construction)	CD-5	PM-10, NOx	State Operating Permit February 9, 2001; Acid Rain Permit December 10, 1998
ES-6A	EP-6	Combustion Engineering Tangentially Fire Boiler Coal Boiler equipped with Startup Burners (1969)	6650x 10 ⁶ Btu/hr	Research Cotrell electrostatic precipitator, Staged Combustion Coal Burners, SCR (under construction)	CD-6	PM-10, NOx	State Operating Permit February 9, 2001; Acid Rain Permit December 10, 1998

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
Fuel Burning Equipment: Turbines							
ES-7A,B,C	EP-7	Combustion Turbine General Electric STAG 107F (1990)	1980.4 Btu/hr	General Electric Steam Injection System	CD-7	NOx	State Operating Permit February 9, 2001 PSD Permit December 28, 1987
ES-8A,B,C	EP-8	Combustion Turbine General Electric STAG 107F (1992)	1980.4 Btu/hr	General Electric Steam Injection System	CD-8	NOx	State Operating Permit February 9, 2001 PSD Permit December 28, 1987; Acid Rain Permit December 10, 1998
Coal and Flyash Processing:							
ES-9a	EP-9	Coal receiving: One (1) Heyl & Patterson railcar unload station	1400 Tons/hr	Good Material Handling Practices	NA	PM-10	State Operating Permit February 9, 2001
ES-9c	EP-9	Coal Conveying System: Continental Conveyors	400-1200 Tons/hr	Good Material Handling Practices	NA	PM-10	State Operating Permit February 9, 2001
ES-9d	EP-9	Coal Pile Maintenance and Wind Erosions	750,000 Tons	Good Material Handling Practices	NA	PM-10	State Operating Permit February 9, 2001
ES-9e	EP-9	Coal Crushing Operations: One (1) Pennsylvania Crusher Corporation Model TTK 36 x 68 Granulator (2003)	1,000 Tons/hr	Good Material Handling Practices	NA	PM-10	New Source Review Permit March 10, 2003
ES-10	EP-10	Fly Ash Reutilization Operations	500,000 Tons/yr	Baghouse, wet suppression	CD-10	PM-10	State Operating Permit February 9, 2001

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
Emergency Combustion Turbines:							
IS-1		Solar T-351 N Simple Cycle Combustion Turbine	4.7 x 10 ⁶ Btu/hr		NA	NOx	State Operating Permit February 9, 2001
IS-2		Solar T-351 N Simple Cycle Combustion Turbine	4.7 x 10 ⁶ Btu/hr		NA	NOx	State Operating Permit February 9, 2001
Emergency Diesel Generator:							
IS-3		Detroit Diesel Generator	7.7 x 10 ⁶ Btu/hr		NA	NOx	State Operating Permit February 9, 2001
Fuel Oil Storage Tanks:							
IS-5		Fuel Oil Storage Tank	11,256,000 gallons		NA	VOC	State Operating Permit February 9, 2001

*The Size/Rated capacity is provided for informational purposes only, and is not an applicable requirement.

III. The Fuel Burning Equipment Requirements: Boilers – (Emission Unit ID# ES-3, ES-4, ES-5, ES-6)

A. Limitation Requirements for Emission Unit ID # ES-3, ES-4, ES-5, ES-6

Unit 3

1. Particulate emissions from boiler three (3) shall be controlled by an electrostatic precipitator. The electrostatic precipitator shall be provided with adequate access for inspection.
 (9 VAC 5-80-110, 9 VAC 5-80-490 B & C and Condition 3 of February 9, 2001 State Operating Permit)
2. The 1,155 x 10⁶ Btu/hr boiler (Emission Unit ID# ES-3) shall consume no more than 404,712 tons/yr of coal at an annual average heating value of 12,500 Btu/lbs, or the number of tons which produce the same total heat input at a different heating value. The 154 X 10⁶ Btu/hr startup and flame stabilization burners shall consume no more than 9,636 X 10³ gallons/yr of oil at an average heating value of 140,000 Btu/gal or the number of gallons which will produce the same total heat input at a different heating value. Each fuel throughput shall be calculated as the sum of each consecutive 12 month period.
 (9 VAC 5-80-110, 9 VAC 5-80-490 B & C and Condition 4 of February 9, 2001 State Operating Permit)
3. Emissions from the operation of unit three (3) shall not exceed the limits specified below:

TSP ¹	0.1 lbs/10 ⁶ Btu**	115.5 lbs/hr	505.9 tons/yr
PM10 ¹	0.1 lbs/10 ⁶ Btu**	115.5 lbs/hr	505.9 tons/yr
SO2 ²	2.64 lbs/10 ⁶ Btu	3,049.2 lbs/hr**	13,355.5 tons/yr
NO2 ³	0.524 lbs/10 ⁶ Btu	605.2 lbs/hr	2,650.9 tons/yr
CO ³		25.5 lbs/hr*	111.8 tons/yr
VOC ³		2.8 lbs/hr	12.1 tons/yr
Pb ³		0.06 lbs/hr	0.25 tons/yr

* CO emissions are based on a combination of oil and coal firing. All other emissions are based on the boiler firing coal only.

** Compliance standard.

1. Particulate and PM-10 emissions limits may change in accordance with an approved emissions allocation plan meeting the requirements of 9 VAC 5-40-910 of State Regulations.

2. Sulfur dioxide emissions for each unit may vary in accordance with 9 VAC 5-40-930 of State Regulations.
3. Emissions are included for inventory purposes.

(9 VAC 5-80-110, 9 VAC 5-80-490 B & C and Condition # 5 of February 9, 2001 State Operating Permit)

Unit 4

4. Particulate emissions from the boiler four (4) shall be controlled by an electrostatic precipitator. The electrostatic precipitator shall be provided with adequate access for inspection.

(9 VAC 5-80-110, 9 VAC 5-80-490 B & C and Condition # 6 of February 9, 2001 State Operating Permit)

5. The $1,761 \times 10^6$ Btu/hr boiler (Emission Unit # ES-4) shall consume no more than 617,054 tons/yr of coal at an annual average heating value of 12,500 Btu/lb, or the number of tons which will produce the same total heat input at a different heating value. The 154×10^6 Btu/hr startup burner and flame stabilization burners shall consume no more than $9,636 \times 10^3$ gallons/yr of oil at an annual average heating value of 140,000 Btu/gal, or the number of gallons which will produce the same total heat input at a different heating value. Each fuel throughput shall be calculated as the sum of each consecutive 12 month period.

(9 VAC 5-80-110, 9 VAC 5-80-490 B & C and Condition #7 of February 9, 2001 State Operating Permit)

6. Emissions from the operation of unit four (4) shall not exceed the limits specified below:

TSP ¹	0.1	lbs/ 10^6 Btu**	176.1	lbs/hr	771.3	tons/yr
PM10 ¹	0.1	lbs/ 10^6 Btu**	176.1	lbs/hr	771.3	tons/yr
SO2 ²	2.64	lbs/ 10^6 Btu	4,649.0	lbs/hr**	20,362.8	tons/yr
NO2 ³	0.498	lbs/ 10^6 Btu	877.0	lbs/hr	3,841.2	tons/yr
CO ³			37.6	lbs/hr*	164.9	tons/yr*
VOC ³			4.2	lbs/hr	18.5	tons/yr
Pb ³			0.09	lbs/hr	0.38	tons/yr

* CO emissions are based on a combination of oil and coal firing. All other emissions are based on the boiler firing coal only.

** Compliance standard.

1. Particulate and PM-10 emissions limits may change in accordance with an approved emissions allocation plan meeting the requirements of 9 VAC 5-40-910 of State Regulations.

2. Sulfur dioxide emissions for each unit may vary in accordance with 9 VAC 5-40-930 of State Regulations.
3. Emissions are included for inventory purposes.

(9 VAC 5-80-110, 9 VAC 5-80-490 B & C and Condition #8 of February 9, 2001 State Operating Permit)

Unit 5

7. Particulate emissions from boiler five (5) shall be controlled by an electrostatic precipitator. The electrostatic precipitator shall be provided with adequate access for inspection.
 (9 VAC 5-80-110, 9 VAC 5-80-490 B & C and Condition #9 of February 9, 2001 State Operating Permit)

8. The 3,604 x 10⁶ Btu/hr boiler shall consume no more than 1,262,841.6 tons/yr of coal at an annual average heating value of 12,500 Btu/lb, or the number of tons which will produce the same total heat input at a different heating value. The 246.4 X 10⁶ Btu/hr startup and flame stabilization burners shall consume no more than 15,418 X 10³ gallons/yr of oil at an annual average heating value of 140,000 Btu/gal, or the number of gallons which will produce the same total heat input at a different heating value. The Atomizing Oil Gun Injector shall consume no more than 540,000 gallons of used oil per year. Each fuel throughput shall be calculated as the sum of each consecutive 12 month period.
 (9 VAC 5-80-110, 9 VAC 5-80-490 B & C and Condition # 10 of February 9, 2001 State Operating Permit)

9. Emissions from the operation of unit five (5) shall not exceed the limits specified below:

TSP ¹	0.1	lbs/10 ⁶ Btu**	360.4	lbs/hr	1,578.6	tons/yr
PM10 ¹	0.1	lbs/10 ⁶ Btu**	360.4	lbs/hr	1,578.6	tons/yr
SO2 ²	2.64	lbs/10 ⁶ Btu	9,514.6	lbs/hr**	41,673.8	tons/yr
NO2 ³	0.589	lbs/10 ⁶ Btu	2,122.8	lbs/hr	9,297.7	tons/yr
CO ³			76.0	lbs/hr*	332.7	tons/yr*
VOC ³			8.7	lbs/hr	37.9	tons/yr
Pb ³			0.18	lbs/hr	0.77	tons/yr

* CO emissions are based on a combination of oil and coal firing. All other emissions are based on the boiler firing coal only.

** Compliance standard.

1. Particulate and PM-10 emissions limits may change in accordance with an approved emissions allocation plan meeting the requirements of 9 VAC 5-40-910 of State Regulations.
2. Sulfur dioxide emissions for each unit may vary in accordance with 9 VAC 5-40-930 of State Regulations.
3. Emissions are included for inventory purposes.
(9 VAC 5-80-110, 9 VAC 5-80-490 B & C and Condition #11 of February 9, 2001 State Operating Permit)

Unit 5 Used Oil Requirements:

10. Except as specified in this permit, the Atomizing Oil Gun Injector is to be installed and operated as represented in the permit application dated February 4, 1993. Any changes in the permit application specifications or any existing facilities which alter the impact of the facility on air quality may require a permit. Failure to obtain such a permit prior to construction may result in enforcement action.
(9 VAC 5-80-110, 9 VAC 5-80-490 B & C and Condition #12 of February 9, 2001 State Operating Permit)
11. Used oil shall only be injected into Unit five (5) when the boiler is operating at or below 360 Megawatts gross. Unit generation shall be recorded in Megawatts during used oil injection.
(9 VAC 5-80-110, 9 VAC 5-80-490 B & C and Condition #13 of February 9, 2001 State Operating Permit)
12. The approved fuel for the oil gun injector is used oil that meets all of the following specification levels:

Arsenic	5 ppm maximum, by weight
Cadmium	2 ppm maximum, by weight
Chromium	10 ppm maximum, by weight
Lead	100 ppm maximum, by weight
Total Halogens	1,200 ppm maximum, by weight
PCB	49 ppm maximum, by weight
Flash Point	100° F minimum

A change in the fuel may require a permit to modify and operate.

(9 VAC 5-80-110, 9 VAC 5-80-490 B & C and Condition #14 of February 9, 2001 State Operating Permit)
13. The permittee shall certify the used oil fuel composition prior to initial usage of the oil gun injector and as described in Condition 12. The certification shall be by a laboratory analysis conducted in accordance with EPA Publication SW-846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods" and in accordance with testing methods required by the Virginia Hazardous Waste Management Regulations.

On-site Oil: For used oils generated on-site, the analysis shall consist of a composite of random samples taken from each collection storage tank or pit. The analysis shall be conducted monthly. If after one year the test data shows no violation of the standards the DEQ may allow quarterly testing. Each certification of on-site used oil shall include the following:

- a. the date of each test
- b. copies of the laboratory analyses indicating the content of Arsenic, Cadmium, Chromium, Lead, Total Halogens, and PCB within the oil in ppm, by weight
- c. documentation of the used oil analysis indicating the locations from which the samples were taken
- d. the analytical method used, and
- e. a statement from the owner or operator that the analyzed fuels are representative of the fuel burned in the permitted equipment.

Off-site Oil: For used oils transported to this site from other Virginia Power locations, the analyses shall include sampling and analysis representative of each shipment of used oil. Each certification of off-site used oil shall include the following:

- a. the name of the fuel supplier or source
- b. the date on which the oil was received
- c. the volume of oil delivered in the shipment
- d. copies of the laboratory analyses indicating the content of Arsenic, Cadmium, Chromium, Lead, Total Halogens, and PCB within the oil in ppm, by weight
- e. dates fuel analyses were performed
- f. documentation of the used oil analysis indicating the location of the oil when the samples were taken
- g. the analytical method used

These records shall be available for inspection by the DEQ and shall be current for the most recent five years.

(9 VAC 5-80-110, 9 VAC 5-80-490 B & C, 9 VAC 5-80-490 F and Condition #16 of February 9, 2001 State Operating Permit)

14. The sulfur content of the used oil to be burned in Unit (5) five shall not exceed 1.0 percent by weight. The annual average of the sulfur content of the used oil to be burned in the coal-fired boiler Unit (5) five shall not exceed 0.5 percent by weight, calculated as follows:

$$\frac{\sum_{n=1}^{12} 3 \text{ (gal oil burned in month } n \times \text{ sulfur content in month } n)}{12 \text{ (gal oil burned in month } n \text{)}} \times 100$$

where n=1 to 12 is the present month and the preceding 11 months.

The permittee shall certify the fuel Sulfur content by a laboratory analysis conducted in accordance with accepted industry standards. For used oils generated on-site, the analysis shall consist of a composite of random samples taken from each collection storage tank or pit. The analysis shall be conducted on a monthly basis. If after one year the test data shows no violation of the standards the DEQ may allow quarterly testing. For used oils transported to this site from other Virginia Power locations, the analysis shall include sampling and analyses representative of each shipment of used oil. Each certification of off-site used oil shall include the following:

- a. the name of the fuel supplier or source
- b. the date on which the oil was received
- c. the volume of used oil delivered in the shipment
- d. documentation of the oil analysis indicating the location of the oil when the sample was received
- e. the sulfur content of the oil including an indication of the method used to determine the Sulfur content in the oil

These records shall be available for inspection by the DEQ and shall be current for the most recent five (5) years.

(9 VAC 5-80-110, 9 VAC 5-80-490 B & C, 9 VAC 5-80-490 F and Condition #17 of February 9, 2001 State Operating Permit)

15. Emissions from the operation of the oil gun shall not exceed the limits specified below:

Total Suspended Particulate (including PM ₁₀)	21.4 lbs/hr	10.7 tons/yr
PM ₁₀	17.9 lbs/hr	9.0 tons/yr
Sulfur Dioxide	79.4 lbs/hr	19.9 tons/yr

Nitrogen Oxides (as NO ₂)	10.3 lbs/hr	5.1 tons/yr
Carbon Monoxide	2.7 lbs/hr	1.4 tons/yr
Volatile Organic Compounds	0.1 lbs/hr	0.1 tons/yr
Lead Compounds	0.3 lbs/hr	0.2 tons/yr
Arsenic Compounds	0.02 lbs/hr	0.01 tons/yr
Cadmium Compounds	0.008 lbs/hr	0.004 tons/yr
Chromium Compounds	0.04 lbs/hr	0.02 tons/yr
Chlorine	4.6 lbs/hr	2.3 tons/yr
Hydrochloric Acid (HCl)	4.0 lbs/hr	2.0 tons/yr
Hydrogen Fluoride	4.6 lbs/hr	2.3 tons/yr
Polychlorinatedbiphenyls (as chlorodiphenyl)	0.2 lbs/hr	0.1 tons/yr

(9 VAC 5-80-110, 9 VAC 5-80-490 B & C and Condition #18 of February 9, 2001 State Operating Permit)

16. The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content of and format of such records shall be arranged with the Director, Piedmont Regional Office. These records shall include, but are not limited to:

- a. Monthly consumption of used oil
- b. annual consumption of used oil, calculated as the sum of each consecutive 12-month period
- c. unit generation, in megawatts (gross), during all periods of used oil injection, tabulated on an hourly basis and indicating associated used oil consumption
- d. annual tabulation of unit generation showing all periods of used oil injection and associated used oil consumption
- e. fuel specification certifications
- f. fuel Sulfur content certifications
- g. amount of oil delivered from other Virginia Power facilities

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.

(9 VAC 5-80-110, 9 VAC 5-80-490 F and Condition #19 of February 9, 2001 State Operating Permit)

Unit 6

17. Particulate emissions from boiler six (6) shall be controlled by an electrostatic precipitator. The electrostatic precipitator shall be provided with adequate access for inspection.
 (9 VAC 5-80-110, 9 VAC 5-80-490 B & C and Condition #20 of February 9, 2001 State Operating Permit)
18. The 6650×10^6 Btu/hr boiler shall consume no more than 2,330,160 tons/yr of coal at an annual average heating value of 12,500 Btu/lbs, or the number of tons which produce the same total heat input at a different heating value. The 358.4×10^6 Btu/hr startup and flame stabilization burners shall consume no more than $22,426 \times 10^3$ gallons/yr of oil at an annual average heating value of 140,000 Btu/gal, or the number of gallons which will produce the same total heat input at a different heating value. Each fuel throughput shall be calculated as the sum of each consecutive 12 month period.
 (9 VAC 5-80-110, 9 VAC 5-80-490 B & C and Condition #21 of February 9, 2001 State Operating Permit)
19. Emissions from the operation of unit six (6) when burning coal shall not exceed the limits specified below:

TSP ¹	0.1	lbs/ 10^6 Btu**	665.0	lbs/hr	2,912.7 tons/yr
PM10 ¹	0.1	lbs/ 10^6 Btu**	665.0	lbs/hr	2,912.7 tons/yr
SO ₂ ²	2.64	lbs/ 10^6 Btu	17,556.0	lbs/hr**	76,895.3 tons/yr
NO ₂ ³	0.616	lbs/ 10^6 Btu	4,096.4	lbs/hr	17,942.2 tons/yr
CO ³			138.6	lbs/hr*	607.2 tons/yr*
VOC ³			16.0	lbs/hr	69.9 tons/yr
Pb ³			0.33	lbs/hr	1.43 tons/yr

* CO emissions are based on a combination of oil and coal firing. All other emissions are based on the boiler firing coal only.

** Compliance standard.

1. Particulate and PM-10 emissions limits may change in accordance with an approved emissions allocation plan meeting the requirements of 9 VAC 5-40-910 of State Regulations.
2. Sulfur dioxide emissions for each unit may vary in accordance with 9 VAC 5-40-930 of State Regulations.
3. Emissions are included for inventory purposes.

(9 VAC 5-80-110, 9 VAC 5-80-490 B & C and Condition #22 of February 9, 2001 State Operating Permit)

Units 3, 4, 5 and 6

20. Visible emissions from the coal fired boilers shall not exceed 20 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 60 percent opacity. Visible emissions shall be determined as indicated by EPA Method 9 (reference: 40 CFR Part 60, Appendix A) or by a continuous emissions monitoring.
(9 VAC 5-80-110, 9 VAC 5-40-80, 9 VAC 5-80-490 B & C and Condition # 24 February 9, 2001 State Operating Permit)

B. Monitoring and Recordkeeping Requirements for Emission Unit ID # ES-3, ES-4, ES-5, ES-6

21. Continuous emission monitors shall be installed to measure and record opacity. The opacity monitor shall be located on the exhaust stacks of unit 3, 4, 5, and 6. The monitors shall be maintained, located, and calibrated in accordance with the requirements listed in 9 VAC 5-40-40 and 9 VAC 5-40-50 and Appendix J of State Regulations.
(9 VAC 5-80-110, 9 VAC 5-80-490 E and Condition #23 of February 9, 2001 State Operating Permit)
22. Compliance with sulfur dioxide emission limits from the coal fired boilers shall be determined by continuous emissions monitoring systems meeting the requirements of 40 CFR 60. Compliance with the sulfur dioxide standard shall be determined by a 30 day rolling average.
(9 VAC 5-80-110, 9 VAC 5-80-490 E and Condition #25 of February 9, 2001 State Operating Permit)
23. Continuous monitors shall be installed to measure and record nitrogen dioxide emissions. The nitrogen dioxide monitors shall be located on the exhaust stacks of unit 3, 4, 5, and 6. The monitors shall be maintained, located, and calibrated in accordance with the requirements listed in 40 CFR 75.
(9 VAC 5-80-110, 9 VAC 5-80-490 E and 40 CFR 72.9)
24. Continuous monitors shall be installed to measure and record the volumetric flow. The volumetric flow monitors shall be located on the exhaust stacks of units 3, 4, 5, and 6. The monitors shall be maintained, located, and calibrated in accordance with the requirements listed in 40 CFR 75.
(9 VAC 5-80-110, 9 VAC 5-80-490 E and 40 CFR 72.9)
25. The electrostatic precipitators shall be equipped with monitoring devices that measure the primary voltage, primary current, and spark rate for each field. The operating condition of each field shall be determined once per shift. Any malfunctioning fields shall be noted and recorded.
(9 VAC 5-80-110, 9 VAC 5-80-490 E and Condition #26 of February 9, 2001 State Operating Permit)

C. Testing Requirements for Emission Unit ID # ES-3, ES-4, ES-5, ES-6

26. The permitted facility shall be constructed so as to allow for emissions testing upon reasonable notice at any time using appropriate methods. Test ports shall be provided at the appropriate locations.
(9 VAC 5-50-40, 9 VAC 5-80-110, 9 VAC 5080-490 E & F and Condition # 15 of February 9, 2001 State Operating Permit)
27. Performance testing shall be conducted for particulate from unit 3, 4, 5, and 6 using reference method 1 - 5, 17, 201 or 202. The performance test shall be used to determine compliance with the particulate emission limits contained in Conditions 3, 6, 9, 20 and/or Article 8, Chapter 40 of State Regulations. The tests shall be performed, and reported within 36 months of the permit issuance or the Department will accept a test that has already been conducted providing that it was conducted within 24 months of permit issuance. Testing shall be conducted and reported and data reduced as set forth in 9 VAC 5-50-30, and the test methods and procedures contained in each applicable section or subpart listed in 9 VAC 5-50-410. The details of the tests are to be arranged with the Piedmont Region. The permittee shall submit a test protocol at least 30 days prior to testing. Two copies of the test results shall be submitted to the Piedmont Region within 60 days after test completion and shall conform to the test report format enclosed with this permit.
(9 VAC 5-40-30, 9 VAC 5-80-110, 9 VAC 5080-490 E & F)

D. Reporting Requirements for Emission Unit ID # ES-3, ES-4, ES-5, ES-6

28. The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Piedmont Region. The records shall include but are not limited to following:
- a. throughput of coal for each unit calculated monthly as the sum of each consecutive twelve (12) month period.
 - b. All fuel supplier certifications, and
 - c. Records of all oil and coal shipments purchased indicating the supplier, volume\weight of the shipment, and date on which the shipment was made, and all subsequent oil and coal analyses to include weight percent sulfur content, and
 - d. Quarterly sulfur dioxide, nitrogen dioxide and excess opacity emissions reports.
 - e. The records required in Conditions 22, 23, 26, and 28 shall be kept on site and made available upon request by the Department.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.

(9 VAC 5-80-900, 9 VAC 5-50-50, 9 VAC 5-80-490F and a, b, c from Condition # 96 of the February 9, 2001 State Operating Permit)

IV. Fuel Burning Equipment Requirements: Turbines (Emission Unit ID # ES – 7A, B, C and ES-8A, B, C)

A. Limitations for Emission Unit ID # ES-7A, B, C and ES-8A, B, C

29. Construction and operation of the two (2) combustion turbines shall be constructed as proposed in the permit application dated February 11, 1987. The permit application and supporting documents (ADDENDUM A) are a part of this permit.

(9 VAC 5-80-110, 9 VAC 5-80-490 B & C and Condition # 27 of the February 9, 2001 State Operating Permit)

30. Each combustion turbine shall consume no more than $14,793 \times 10^6$ cubic feet of natural gas, 104.54×10^6 gallons of No. 2 oil, or $2,157.5 \times 10^6$ pounds coal gas per year, based on the following heating values (HHV) and densities: natural gas, 23,000 Btu per pound, 0.04515 pounds per cubic feet; distillate oil, 19,663 Btu per pound, 7.105 pounds per gallon; and coal gas, 6,639 Btu per pound.

(9 VAC 5-80-110, 9 VAC 5-80-490 B & C and Condition # 28 of the February 9, 2001 State Operating Permit)

31. Emissions from the operation of each unit at full load shall not exceed the limitations specified below:

TSP	0.11 lbs/ 10^6 Btu	19 lbs/hr	73 tons/yr
SO ₂	0.33 lbs/ 10^6 Btu	572 lbs/hr	2,233 tons/yr
CO		140 lbs/hr	544 tons/yr
Lead		0.0338 lbs/hr	0.134 tons/yr

(9 VAC 5-80-110, 9 VAC 5-80-490 B & C and Condition # 29 of the February 9, 2001 State Operating Permit)

32. Visible emissions from Unit (7) and (8) shall not exceed 20 percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A), except during one six-minute period in any one hour in which visible emissions shall not exceed 30 percent opacity. This condition applies at all times except during startup, shutdown and malfunction.

(9 VAC 5-50-80, 9 VAC 5-80-490 B & C and Condition # 30 of the February 9, 2001 State Operating Permit)

33. Steam Injection at "maximum moisturization" has been determined as BACT for NO_x emissions from this source. Nitrogen oxides emissions from each unit shall not exceed the following limitations when burning the fuel specified.

	NO _x Emission Limitations	
	Exhaust Concentration At 15% O ₂ <u>(ppmvd)</u>	Mass Emission Rate (pounds per hour, as NO ₂ At ISO Ambient <u>Conditions</u>)
Natural Gas	42	260
Coal Gas	77	432
No. 2 Distillate Oil		
<0.015% Fuel Bound Nitrogen by wt	65	413
≥0.015% Fuel Bound Nitrogen by wt	77	490

(9 VAC 5-50-270, 9 VAC 5-80-110, 9 VAC 5-80-490 B & C of State Regulations and Condition # 31 of the February 9, 2001 State Operating Permit)

34. Volatile Organic Compound emissions shall not exceed the emission limitations specified below:

Emission Limitations	
<u>Pound per 10⁶ Btu, HHV</u> 0.0103	Mass Emission Rate At ISO Ambient <u>Conditions</u> 17.5 pounds per hour

(9 VAC 5-80-110, 9 VAC 5-80-490 B&C and Condition # 32 of the February 9, 2001 State Operating Permit)

35. Non-criteria pollutant emissions (beryllium, mercury, arsenic, fluorides, radon - 222, radionuclides and sulfuric acid mists) from the operation of each unit shall be limited by not exceeding the fuel usage under Condition 30.

(9 VAC 5-80-110, 9 VAC 5-80-490 B & C and Condition # 33 of the February 9, 2001 State Operating Permit)

36. Nitrogen oxide emissions from each unit shall be controlled by steam injection. The steam injection system shall be provided with adequate access for inspection. The maximum fuel-bound nitrogen content of the fuel to be burned in each unit shall not exceed 0.015 percent by weight of natural gas and coal gas and 0.05 percent by weight of No. 2 oil.
(9 VAC 5-80-110, 9 VAC 5-80-490 B & C and Condition # 34 of the February 9, 2001 State Operating Permit)
37. Sulfur dioxide emissions from Units (7) seven and (8) eight shall be controlled by limiting sulfur content of fuel. The maximum sulfur content of the fuel shall not exceed 0.3 percent by weight.
(9 VAC 5-80-110, 9 VAC 5-80-490 B & C and Condition # 35 of the February 9, 2001 State Operating Permit)
38. Carbon monoxide, total suspended particulates, and hydrocarbons emissions from each unit shall be controlled by equipment design for efficient combustion.
(9 VAC 5-80-110, 9 VAC 5-80-490 B & C and Condition # 36 of the February 9, 2001 State Operating Permit)
39. The approved fuels for each unit are natural gas, No. 2 fuel oil and coal gas. A change in the fuel may require a permit to modify and operate.
(9 VAC 5-80-110, 9 VAC 5-80-490 B & C and Condition # 37 of the February 9, 2001 State Operating Permit)
40. Condition 35 of this permit lists the names of non-criteria pollutants to be emitted by units seven (7) and eight (8). A change in the amounts of these pollutants emitted and/or a change in your facility which results in additional non-criteria pollutants to be emitted may require a permit to modify and operate.
(9 VAC 5-80-110, 9 VAC 5-80-490 B & C and Condition # 40 of the February 9, 2001 State Operating Permit)
41. Virginia Power shall meet all the applicable requirements of 40 CFR 60 Subpart GG - Standards of Performance for Stationary Gas Turbines. Section 60.335 should be corrected to read:

$$NO_x = (NO_{x\text{ OBS}}) \frac{(P_{\text{REF}})^{0.5}}{(P_{\text{OBS}})} * e^{19} * (H_{\text{OBS}} - 0.00633) \left(\frac{288}{(T_{\text{AMB}})} \right)^{1.53}$$

Where:

NO_x = Emissions of NO_x at 15 percent oxygen and ISO standard ambient air conditions.

$NO_{x\text{OBS}}$ = Measured NO_x emissions at 15 percent oxygen, ppmvd.

P_{REF} = Reference combustor inlet absolute pressure at 101.3 kilopascals ambient pressure.

P_{OBS} = Measured combustor inlet absolute pressure at test.

H_{OBS} = Specific humidity of ambient air at test.

e = Transcendental constant (2.718).

T_{AMB} = Temperature of ambient air at test ($^{\circ}K$).

(9 VAC 5-80-110, 9 VAC 5-80-490 B & C and Condition # 43 of the February 9, 2001 State Operating Permit)

42. Units 7 and 8 are to be constructed and operated as represented in the permit application dated February 11, 1987. No changes in the permit application specifications or any existing facilities shall be made which alter the emissions into the ambient air or alter the impact of the facility on air quality without the prior written approval of the Board.
(9 VAC 5-80-110, 9 VAC 5-80-490 B & C and Condition # 47 of February 9, 2001 State Operating Permit)

B. Monitoring Requirements for Emission Units ID # ES-7A, B, C and ES-8A, B, C

43. A continuous monitoring system shall be installed to monitor and record the fuel consumption and the ratio of steam to fuel being fired in the turbines. It shall be maintained and calibrated in accordance with manufacturer's specifications.
(9 VAC 5-80-110, 9 VAC 5-80-490 E and Condition # 39 of the February 9, 2001 State Operating Permit and 40 CFR 60 Subpart GG)
44. Virginia Power shall monitor the sulfur and nitrogen content of the fuel being fired in the turbines in accordance with 40 CFR 60 Section 60.334(b).
(9 VAC 5-80-110, 9 VAC 5-80-490 E and Condition # 41 of the February 9, 2001 State Operating Permit and 40 CFR 60 Subpart GG)
45. Units (7) and (8) shall operate in compliance with Rules 4-3 and 5-3, Non-Criteria Pollutants. No changes in the facility that alter emissions of any non-criteria pollutant or cause the emission of additional non-criteria pollutants shall be made without the prior written approval of the Board.
(9 VAC 5-80-110, 9 VAC 5-80-490 E and Condition # 48 of the February 9, 2001 State Operating Permit)

C. Recordkeeping Requirements for Emission Units ID # ES-7A, B, C and ES-8A, B, C

46. Virginia Power shall submit excess emissions reports for sulfur dioxide, nitrogen dioxide, ice fog and emergency fuel as required in 40 CFR 60 Section 60.334(c). The reports shall be

submitted in writing to the Board (Director, Piedmont Regional Office) quarterly beginning the third month after the start of operation.

(9 VAC 5-50-410, 9 VAC 5-80-110, 9 VAC 5-80-490 E and Condition # 42 of the February 9, 2001 State Operating Permit and 40 CFR 60 Subpart GG)

D. Testing Requirements for Emission Units ID # ES -7A, B, C and ES-8A, B, C

47. In order to facilitate continuing compliance measurements, test ports shall be provided at the permanent stack or duct work for each unit.

(9 VAC 5-40-30, 9 VAC 5-80-490 E & F and Condition # 38 of the February 9, 2001 State Operating Permit)

48. The permitted facility shall be designed and constructed so as to allow emissions testing using the methods prescribed upon reasonable notice at any time.

(9 VAC 5-50-30, 9 VAC 5-80-490 E & F and Condition # 44 of the February 9, 2001 State Operating Permit)

E. Reporting Requirements for Emission Units ID # ES- 7A, B, C and ES-8A, B, C

49. Virginia Power shall retain records of all emission data and operating parameters required to be monitored for turbine (7) seven and (8) eight. These records shall be maintained by the source for a period of at least two (2) years.

(9 VAC 5-50-50, 9 VAC 5-80-110, 9 VAC 5-80-490 F and Condition #45 of the February 9, 2001 State Operating Permit)

50. If, for any reason, Unit (7) seven and (8) eight does not comply or will not be able to comply with the emission limitations or other conditions specified in this section, the permittee shall provide in writing to the Board (Director, Piedmont Regional Office) the following information as soon as possible but no later than five (5) days after such conditions become known to the permittee:

- a. description of noncompliance;
- b. cause of noncompliance;
- c. anticipated time the noncompliance is expected to continue or, if corrected, the actual duration of noncompliance;
- d. steps taken by the permittee to minimize or eliminate the non-compliance; and
- e. steps taken by the permittee to prevent recurrence of the non-compliance.

Submittal of this report does not constitute a waiver of the emission limitations or other conditions of this permit nor does it in any way restrict the SAPCB's authority to enforce the permit conditions pursuant to Section 113 of the Clean Air Act.

(9 VAC 5-80-110, 9 VAC 5-80-490 F and Condition # 46 of the February 9, 2001 State Operating Permit)

51. Approval of Conditions 29 to 51 is only applicable to the permit requirements of the State Air Pollution Control Board and does not alter permit requirements by any other local, state, or federal government agency. Virginia Power is cautioned that approval of this permit should not be construed to mean its operation is automatically in compliance with all aspects of the Regulations for the Control and Abatement of Air Pollution. The Department of Environmental Quality personnel will be constantly evaluating all sources for compliance with Part V, 9 VAC 5-50-80 - Standard for Visible Emissions, 9 VAC 5-50-90 - Standard for Fugitive Dust/Emissions, and 9 VAC 5-50-140 - Standard for Odorous Emissions. Compliance with all air pollution regulations must be a continuing, full time effort. (9 VAC 5-80-110, 9 VAC 5-80-490 F and Condition # 49 of the February 9, 2001 State Operating Permit)

**V. Process Equipment Requirements: Coal Handling Equipment –
(Emission unit ID# ES-9a, ES-9c, ES-9d , ES-9e**

A. Limitations for Units ES-9a, ES-9c, ES-9d, ES-9e

52. The equipment to be constructed at this facility consists of:
- one coal crusher (ES-9e) rated at 1,000 tons/hr (NSPS)
(9 VAC 5-80-110 and Condition # 2 of the March 10, 2003 New Source Review Permit)
53. Particulate emissions from the coal crusher (ES-9e) shall be controlled by a full enclosure. The full enclosure shall be provided with adequate access for inspection.
(9 VAC 5-80-110 and Condition # 3 of the March 10, 2003 New Source Review Permit)
54. The full enclosure shall maintain a control efficiency of no less than 95% of PM and 90% PM10.
(9 VAC 5-80-110 and Condition # 4 of the March 10, 2003 New Source Review Permit)
55. Fugitive dust and fugitive emissions controls shall include the following, or equivalent, as a minimum:
- a. Dust from material handling, screens, transfers, and load-outs, shall be controlled by wet suppression or equivalent (as approved by DEQ).
 - b. All material being stockpiled shall be kept adequately moist to control dust during storage and handling or covered at all times to minimize emissions.
 - c. Dust from haul roads and traffic areas shall be controlled by the application of asphalt, water, suitable chemicals, or equivalent methods approved by the DEQ.
 - d. Reasonable precautions shall be taken to prevent deposition of dirt on public roads and subsequent dust emissions. Dirt, product, or raw material spilled or tracked onto

paved surfaces shall be promptly removed to prevent particulate matter from becoming airborne.
(9 VAC 5-80-110, 9 VAC 5-50-90 and Condition # 5 of the March 10, 2003 New Source Review Permit)

56. The throughput of raw coal for the one coal crusher (Unit ID ES-9e) shall not exceed 4,614,768 tons, calculated as the sum of each consecutive 12 month period.
(9 VAC 5-80-110 and Condition # 6 of the March 10, 2003 New Source Review Permit)

57. Emissions from the operation of the coal crusher (Unit ID ES-9e) shall not exceed the limitations specified below:

TSP	1.8 lbs/hr	4.2 tons/yr
PM10	0.3 lbs/hr	0.6 tons/yr

These emissions are derived from the estimated overall emissions contribution. Compliance shall be determined as stated in Conditions 53 and 56.
(9 VAC 5-80-110 and Condition # 7 of the March 10, 2003 New Source Review Permit)

58. Visible emissions from the coal crusher (ES-9e) shall not exceed 20 percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown and malfunction.
(9 VAC 5-50-80, 9 VAC 5-80-110 and Condition # 8 of the March 10, 2003 New Source Review Permit)

59. Except where this permit is more restrictive than the applicable requirement, the NSPS equipment as described in Condition 52 shall be operated in compliance with the requirements of 40 CFR 60, Subpart Y.
(9 VAC 5-50-400, 9 VAC 5-50-410, 9 VAC 5-80-110 and Condition # 9 of the March 10, 2003 New Source Review Permit)

60. The yearly throughput of coal to the eleven coal conveyors shall not exceed 4,614,768 tons, calculated as the sum of each consecutive 12 months period.
(9 VAC 5-170-160 and Condition # 58 of the February 9, 2001 State Operating Permit)

61. Emissions from the operation of coal conveyors shall not exceed the limitations specified below:

TSP	110.0 lbs/hr	27.0 tons/yr
PM10	110.0 lbs/hr	27.0 tons/yr

These emissions are derived from the estimated overall emissions contribution. Compliance shall be determined as stated in Conditions 60 and 65.
(9 VAC 5-80-110 and Condition # 59 of the February 9, 2001 State Operating Permit)

62. Emissions from the coal storage pile shall not exceed the limitations specified below:

TSP	123.8 tons/yr
PM10	58.5 tons/yr

These emissions are derived from the estimated overall emissions contribution. Compliance shall be determined as stated in Condition 65 of the February 9, 2001 State Operating Permit. (9 VAC 5-80-110 and Condition # 60 of the February 9, 2001 State Operating Permit)

63. The yearly throughput of coal to the rail car unloading system shall not exceed 4,614,768 tons, calculated as the sum of each consecutive 12 month period.
(9 VAC 5-80-110 and Condition # 61 of the February 9, 2001 State Operating Permit)

64. Emissions from the operation of rail car unloading system shall not exceed the limitations specified below:

TSP	82.0 lbs/hr	135.2 tons/yr
PM10	82.0 lbs/hr	135.2 tons/yr

These emissions are derived from the estimated overall emissions contribution. Compliance shall be determined as stated in Conditions 63 and 65 of the State Operating Permit. (9 VAC 5-80-110 and Condition # 62 of the February 9, 2001 State Operating Permit)

65. Visible emissions from the coal storage piles, coal conveyors, coal rail car unloading system and coal crushing equipment shall not exceed 20 percent opacity, except for one six (6) minute-period in any one (1) hour of not more than 60 percent opacity. Failure to meet the requirements of this section because of the presence of water vapor shall not be a violation of this section.
(9 VAC 5-40-80, 9 VAC 5-80-110 and Condition # 63 of the February 9, 2001 State Operating Permit)

66. The coal storage piles, coal conveyors, and coal rail car unloading system and coal crushing equipment shall operate in compliance with Chapter 4, Article 1, Emissions Standards for Visible Emissions and Fugitive Dust/Emissions.
(9 VAC 5-80-110 and Condition # 64 of the February 9, 2001 State Operating Permit)

B. Monitoring Requirements for Emission Units ID # ES-9A, ES-9c, ES-9d, ES-9e

67. At least one time per week, an observation of the presence of visible emissions from the coal handling and fly ash handling systems shall be made. If visible emissions are observed, the permittee shall take timely corrective actions such that the systems resume operation with no visible emissions, or perform a visible emission evaluation (VEE) in accordance with 40 CFR 60, Appendix A, Method 9 to assure visible emissions from the systems do not exceed twenty percent (20%) opacity. The VEE shall be conducted for a minimum of six minutes. If compliance is not demonstrated by this VEE, timely corrective action shall be taken such

that the systems resume operation with visible emissions of 20 percent or less. The permittee shall maintain an observation log to demonstrate compliance. The log shall include the date and time of the observations, whether or not there were visible emissions, any VEE recordings and any necessary actions.

(9 VAC 5-80-110 of State Regulations)

C. Recordkeeping for Emission Units # ID ES-9A, ES-9C, ES-9E

68. The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Piedmont Regional Office. These records shall include, but are not limited to:

1. The annual throughput of raw coal processed, calculated monthly as the sum of each consecutive 12 month period
2. Scheduled and unscheduled maintenance and training records.
3. Logbook to be maintained on-site that provides the weekly opacity observations and any excess opacity episodes

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.

(9 VAC 5-80-110, 9 VAC 5-80-410 of State Regulations and Condition # 11 of the March 10, 2003 New Source Review Permit)

D. Testing Requirements for Emission Units ID # ES -9a, ES-9c, ES-9d, ES-9e

69. The permitted facility shall be constructed so as to allow for emissions testing and monitoring upon reasonable notice at any time, using appropriate methods. Test ports shall be provided when requested at the appropriate locations.

(9 VAC 5-80-110, and Condition # 12 of the March 10, 2003 New Source Review Permit)

70. A Visible Emission Evaluation (VEE) in accordance with 40 CFR Part 60, Appendix A, Method 9, shall be on the following equipment: coal crusher (ES-9e). Each test shall consist of 30 sets of 24 consecutive observations (at 15 second intervals) to yield a six minute average. The details of the test are to be arranged with the Director, Piedmont Region. The evaluation shall be performed within 60 days after achieving the maximum production rated at which the facility will be operated but in no event later than 180 days after start-up of the permitted facility. Two copies of the test results shall be submitted to the Director, Piedmont Region within 45 days after test completion and shall conform to the test report format enclosed with this permit.

(9 VAC 5-50-30, 9 VAC 5-80-110 and Condition # 13 of the March 10, 2003 New Source Review Permit)

E. Reporting Emission Units # ID ES-9A, ES-9C, ES-9E

71. The permittee shall furnish written notification to the Piedmont Region:

1. The anticipated date of opacity observations of the coal crusher (ES-9e) postmarked at least 30 days prior to such date.

Copies of the written notification referenced above are to be sent to:

Associate Director, Office of Air Enforcement (3AP10)
U.S. Environmental Protection Agency, Region III
1650 Arch Street
Philadelphia, PA 19103-2029
(9 VAC 5-50-50, 9 VAC 5-80-110 and Condition # 14 of the March 10, 2003 New Source Review Permit)

VI. Process Equipment Requirements: Flyash Reutilization (Emission Unit# ES-10)

A. Limitations for Unit ES-10

72. Particulate and PM10 emissions from ash excavating, unpaved haul roads, paved haul roads, pugmill ash transfers, haul truck loading, wind erosion from inactive ash areas, wind erosion from active areas, rubber tire loader operation, cat dozer operation, stabilization agent pneumatic transfers, pugmill stabilization agent transfers, pugmill operations, and the transfer of the stabilization agent/ash mixture shall be controlled as described in the best management practice plan in attachment B and as follows:

- a. Traffic areas, shall be controlled by wet suppression or equivalent (as approved by the DEQ).
- b. Unpaved road ways shall be controlled by wet suppression. Virginia Power shall apply a minimum of 0.01 inches of water to all unpaved road surfaces on a daily basis.
- c. All material being stockpiled shall be kept moist to control dust during storage and handling or covered at all times to minimize emissions.
- d. Paved haul roads shall be controlled by wet suppression.
- e. Reasonable precautions shall be taken to prevent deposition of dirt on public roads and subsequent dust emissions. These measures shall include paving the haul road for the first 0.7 miles from the public road. Trucks leaving the site shall have clean wheels - achieved by use of a wheel washer or equivalent. Dirt spilled or tracked onto paved surfaces shall be promptly removed to prevent particulate matter from becoming airborne.

(9 VAC 5-80-110 and Condition # 66 of the February 9, 2001 State Operating Permit)

73. Particulate and PM10 emissions from the pneumatic loading of the two (2) cement silos shall be controlled by fabric filter with a rated control efficiency of 99 percent. The fabric filter shall be provided with adequate access for inspection.
(9 VAC 5-80-110 and Condition # 67 of the February 9, 2001 State Operating Permit)
74. The flyash reutilization project shall process no more than 2,000,000 tons of flyash per year, and shall utilize no more than 133,333 trucks per year (based upon the proposed truck hauling weight specification), or the number of trucks which will produce equivalent emissions at different actual truck hauling weights, calculated as the sum of each consecutive 12 month period.
(9 VAC 5-80-110 and Condition # 68 of the February 9, 2001 State Operating Permit)
75. The annual throughput of stabilization agent to the silo(s) shall not exceed 100,000 tons per year calculated monthly as the sum of each consecutive 12 month period.
(9 VAC 5-80-110 and Condition # 69 of the February 9, 2001 State Operating Permit)
76. Emissions from the operation of the flyash reutilization project shall not exceed the limits specified below:

Total Suspended Particulate	80.7 lbs/hr	24.6 tons/yr
PM10	33.0 lbs/hr	7.9 tons/yr

Compliance with these emission limits shall be determined by compliance with the Best Management Practice Plan and Conditions 72 to 75.

(9 VAC 5-80-110 and Condition # 70 of the February 9, 2001 State Operating Permit)

77. Visible emissions from ash excavating, paved haul roads, pugmill ash transfers, haul truck loading, wind erosion from inactive ash areas, wind erosion from active areas, rubber tire loader operation, cat dozer operation, pugmill stabilization agent transfer, pugmill operation, and the transfer of stabilization agent/ash mixture shall not exceed ten (10%) percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A).
(9 VAC 5-50-80, 9 VAC 5-80-110 and Condition # 71 of the February 9, 2001 State Operating Permit)
78. Visible emissions from the unpaved haul roads shall not exceed five (5 %) percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A).
(9 VAC 5-50-80, 9 VAC 5-80-110 and Condition # 72 of the February 9, 2001 State Operating Permit)
79. Visible emissions from the pneumatic loading of the storage silo shall not exceed five (5%) percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A)
(9 VAC 5-50-80, 9 VAC 5-80-110 and Condition # 73 of the February 9, 2001 State Operating Permit)

80. The permittee shall furnish written notification to the Director, Piedmont Region of:
- a. The actual date on which the ash removal project commenced, shall be reported within thirty (30) days after commencement.
 - b. Anticipated date of initial start-up of the ash removal project postmarked not more than 60 days nor less than 30 days prior to such date.

(9 VAC 5-80-110 and Condition # 74 of the February 9, 2001 State Operating Permit)

81. This permit (referring to the February 9, 2001 permit) shall become invalid if installation of the proposed ash removal project is not commenced within eighteen (18) months of the date of this permit or if it is discontinued for a period of eighteen (18) months.
(9 VAC 5-80-110 and Condition # 75 of the February 9, 2001 State Operating Permit)

B. Monitoring, Recordkeeping and Testing Requirements for Emission Units ID# ES-10

82. Each fabric filter shall be equipped with a device to continuously measure the differential pressure drop across the fabric filter. The device shall be installed in an accessible location and shall be maintained by the permittee such that it is in proper working order at all times. At least one time per week, an observation of the presence of visible emissions from the coal handling and fly ash handling systems shall be made. If visible emissions are observed, the permittee shall take timely corrective actions such that the systems resume operation with no visible emissions, or perform a visible emission evaluation (VEE) in accordance with 40 CFR 60, Appendix A, Method 9 to assure visible emissions from the systems do not exceed twenty percent (20%) opacity. The VEE shall be conducted for a minimum of six minutes. If compliance is not demonstrated by this VEE, timely corrective action shall be taken such that the systems resume operation with visible emissions of 20 percent or less. The permittee shall maintain an observation log to demonstrate compliance. The log shall include the date and time of the observations, whether or not there were visible emissions, any VEE recordings and any necessary actions.
(9 VAC 5-80-110)
83. The Best Management Practice Plan for Fly Ash Reutilization, which contains monitoring and testing requirements, is attached as a part of the Title V permit.
(9 VAC 5-40-30, and 9 VAC 5-80-110)

C. Reporting for Emission Unit # ES-10

84. The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content of and format of such records shall be arranged with the Director, Piedmont Regional Office. These records shall include, but are not limited to:

- a. The yearly throughput of flyash in tons, calculated as the sum of each consecutive 12 month period,
- b. The yearly total usage of trucks, both vehicle miles traveled and number of trucks, for the flyash reutilization project, calculated as the sum of each consecutive 12 month period,
- c. The yearly throughput of stabilization agent to the silo, calculated as the sum of each consecutive 12 month period and
- d. The amount of water applied to the unpaved roadways. In addition, Virginia Power shall provide the records and calculations needed to determine compliance with condition emissions from the flyash Reutilization Project.

(9 VAC 5-80-110, 9 VAC 5-50-50 and Condition # 96 of the February 9, 2001 State Operating Permit)

VII. Process Equipment Requirements: Emergency Combustion Turbines, Diesel Generator, Oil Storage Tanks (Emission Units # IS-1, IS-2, IS-3, IS-5)

A. Limitations, Monitoring, Recordkeeping, Testing and Reporting Requirements for Units # IS-1, IS-2, IS-3, IS-5

85. Each of the two (2) combustion turbines shall consume no more than 16,800 gallons of No. 2 oil per year, calculated as the sum of each consecutive 12 month average.
(9 VAC 5-80-110 and Condition # 50 of the February 9, 2001 State Operating Permit)
86. Emissions from the operation of each emergency combustion turbine shall not exceed the limits specified below:

SO ₂ ¹	2.64 lbs/10 ⁶ Btu	12.4 lbs/hr	3.1 tons/yr
NO ₂ ²		3.2 lbs/hr	0.8 tons/yr

1. Sulfur dioxide emissions for each unit may vary in accordance with 9 VAC 5-40-280 of State Regulations. Compliance shall be based on the emissions in pound per hour.
2. Emissions are included for inventory purposes.

(9 VAC 5-80-110 and Condition # 51 of the February 9, 2001 State Operating Permit)

87. Visible emissions from each of the emergency gas turbines shall not exceed 20 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 60 percent opacity. Visible emissions shall be determined as indicated by EPA

Method 9 (reference: 40 CFR Part 60, Appendix A). This condition applies at all times except during startup, shutdown and malfunction.

(9 VAC 5-40-80, 9 VAC 5-80-110 and Condition # 52 of the February 9, 2001 State Operating Permit)

88. The generator shall consume no more than 27,500 gallons of No. 2 oil per year, calculated as the sum of each consecutive 12 month average.

(9 VAC 5-80-110 and Condition # 53 of the February 9, 2001 State Operating Permit)

89. Emissions from the operation of emergency generator shall not exceed the limits specified below:

SO ₂ ¹	2.64 lbs/10 ⁶ Btu	20.3 lbs/hr	5.1 tons/yr
NO ₂ ²		23.9 lbs/hr	6.0 tons/yr
CO ²		6.2 lbs/hr	1.6 tons/yr

1. Sulfur dioxide emissions for each unit may vary in accordance with 9 VAC 5-40-280 of State Regulations. Compliance shall be based on the emissions in pound per hour.

2. Emissions are included for inventory purposes.

(9 VAC 5-80-110 and Condition # 54 of the February 9, 2001 State Operating Permit)

90. Visible emissions from each of the diesel generators shall not exceed 20 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 60 percent opacity. Visible emissions shall be determined as indicated by EPA Method 9 (reference: 40 CFR Part 60, Appendix A). This condition applies at all times except during startup, shutdown and malfunction.

(9 VAC 5-40-80, 9 VAC 5-80-110 and Condition # 55 of the February 9, 2001 State Operating Permit)

91. Records shall be kept indicating the content and vapor pressure of the liquid stored in each of the following tanks, the one (1) fixed roof storage tank with a storage capacity of 11,256,000 gallons, and the fixed roof fuel oil storage tank with a storage capacity of 60,000 gallons.

(9 VAC 5-80-110 and Condition # 65 of the February 9, 2001 State Operating Permit)

**VIII. Process Equipment Requirements: Selective Catalytic Reduction
Installation – Pollution Control Project (Emission Units # ES-4, ES-5, ES-6)**

A. Limitations, Monitoring, Recordkeeping, Testing and Reporting Requirements for Units # ES-4, ES-5, ES-6

Environmental Benefit:

92. Emissions of nitrogen oxides, as necessary to meet the requirements of the Federal and/or State Implementation Plan, from units 4, 5, and/or 6 shall be controlled by the use of ammonia injection and selective catalytic reduction control equipment.
(9 VAC 5-80-110 and Condition # 76 of the February 9, 2001 State Operating Permit)

93. Nitrogen oxide emissions, starting in the year 2004, from May 1 to September 30 (inclusive), except as provided in Condition 94 of this permit, shall not exceed the allocations established in the Nitrogen Oxide Federal or State Implementation Plan. Virginia Power will determine the actual Nitrogen oxide emissions released from the Chesterfield Power Station from May 1 to September 30 of each calendar year. NO_x emissions, for emissions units operating continuous emissions monitors, shall be determined by continuous emission monitors, operated in accordance with the provisions of 40 CFR 75. Data generated by the continuous emissions monitors shall be processed in accordance with 40 CFR Part 60. For emissions units not required to operate continuous emissions monitors, AP-42 emissions factors, manufacturer's data, or stack testing data shall be used to calculate Nitrogen oxide emissions. Virginia Power shall provide the calculated nitrogen oxide emissions and any supporting data that the Department requests. All information shall be submitted with the annual emissions statements, in order that the Department may verify that the Federal or State Implementation Plan limits are being met. This permit may be reopened to include the actual Federal and/or State Implementation Plan requirements.
(9 VAC 5-80-110 and Condition # 77 of the February 9, 2001 State Operating Permit)

94. Nitrogen oxide emissions may exceed the allowable allocations established in the Nitrogen Oxide Federal or State Implementation Plan and Condition 93 as allowed in the emissions trading portions of the Federal and/or State Implementation Plan.
(9 VAC 5-80-110 and Condition # 78 of the February 9, 2001 State Operating Permit)

Particulate Mitigation requirements:

95. Particulate emissions and emissions increases from the selective catalytic reduction equipment ammonia injection shall be controlled by an electrostatic precipitator. The electrostatic precipitator shall be provided with adequate access for inspection.
(9 VAC 5-80-110 and Condition # 79 of the February 9, 2001 State Operating Permit)

96. Virginia Power shall develop and submit a plan for minimizing particulate emissions, and any other emission increases that may result from the selective catalytic reduction equipment. The plan shall establish good operating practices for the use of ammonia and shall include requirements to demonstrate compliance with Conditions 100 and 101. The plan shall

recognize particulate emissions increases resulting from the degradation of the catalyst. The plan shall be submitted to the Piedmont Regional Office for approval within 60 days after commercial operation. This permit may be reopened to incorporate the requirements of the plan. The plan may be changed or reopened without reissuance of a permit. The Department shall approve all plan changes.

(9 VAC 5-80-110 and Condition # 80 of the February 9, 2001 State Operating Permit)

97. Performance testing shall be conducted to determine an initial ratio of particulate emissions increases to nitrogen oxide decreases resulting from the selective catalytic reduction control equipment and ammonia injection. Testing details shall be included in the protocol required in Condition 98.

(9 VAC 5-80-110, 9 VAC 5-50-30 and Condition # 81 of the February 9, 2001 State Operating Permit)

98. Performance testing shall be conducted for particulate from units 4, 5, and 6 using reference method 1 - 5, or 17 or method 201 or 202a. The performance test shall be used to determine compliance with Article 8, Chapter 40 of State Regulations. In addition, testing shall be used to establish particulate increases resulting from operation of the selective catalytic reduction equipment. The tests shall be performed, within 60 days of each selective catalytic reduction unit(s) beginning commercial operation. Tests shall be conducted and reported and data reduced as set forth in 9 VAC 5-50-30, and the test methods and procedures contained in each applicable section or subpart listed in 9 VAC 5-50-410. The details of the tests are to be arranged with the Piedmont Regional Office. The permittee shall submit a test protocol at least 30 days prior to testing. Two copies of the test results shall be submitted and reported to the Piedmont Region within 60 days after test completion and shall conform to the test report format enclosed with this permit.

(9 VAC 5-80-110, 9 VAC 5-40-30, 9 VAC 5-50-30 and Condition # 82 of the February 9, 2001 State Operating Permit)

99. Virginia Power shall conduct additional performance tests for particulate from Units 4, 5, and 6 to demonstrate compliance with the particulate emission limits in this permit and to determine a range of ratios of particulate emissions increases to nitrogen oxide decreases. The tests shall be conducted once every five-calendar years at a minimum. The details of the tests shall be arranged with the Piedmont Regional Office.

(9 VAC 5-80-110, 9 VAC 5-40-30, 9 VAC 5-50-30 and Condition # 83 of the February 9, 2001 State Operating Permit)

Operating and maintenance practices:

100. The selective catalytic reduction control equipment shall be operated and maintained in a manner consistent with good air pollution control practices for minimizing emissions, including periods of startup, shut down, soot blowing, malfunction, and Conditions 92 through 96.

(9 VAC 5-80-110, 9 VAC 5-40-20 E, 9 VAC 5-50-20 E of State Regulations and Condition # 84 of the February 9, 2001 State Operating Permit)

101. Virginia Power shall monitor and record all parameters necessary to demonstrate compliance with Condition 96 and 100.
(9 VAC 5-80-110, 9 VAC 5-40-40 F, 9 VAC 5-50-40 F of State Regulations and Condition # 85 of the February 9, 2001 State Operating Permit)

Construction requirements:

102. Quarterly reports on the progress of construction of each selective catalytic reduction unit shall be submitted to the, Piedmont Regional Office, beginning 30 days after construction starts.
(9 VAC 5-80-110 and Condition # 86 of the February 9, 2001 State Operating Permit)

103. The permittee shall furnish written notification to the Piedmont Regional Office of:
- a. The actual date on which construction and modification of each selective catalytic reduction unit commenced within 30 days after such date.
 - b. The anticipated start-up date of each selective catalytic reduction unit postmarked not more than 60 days nor less than 30 days prior to such date.
 - c. The actual start-up date of each selective catalytic reduction unit within 15 days after such date.
 - d. The anticipated date of performance tests for particulate from each boiler and selective catalytic reduction unit postmarked at least 30 days prior to such date.

(9 VAC 5-80-110, 9 VAC 5-50-50 of State Regulations and Condition # 87 of the February 9, 2001 State Operating Permit)

104. The portions of this permit associated with the selective catalytic reduction equipment shall become invalid, unless an extension is granted by the DEQ, if:
- a. A program of continuous construction is not commenced before the latest of the following:
 - i. 18 months from the date of this permit;
 - ii. Nine months from the date that the last permit or other authorization was issued from any other governmental agency;
 - iii. Nine months from the date of the last resolution of any litigation concerning any such permits or authorization; or
 - b. A program of construction is discontinued for a period of 18 months or more, or is not completed within a reasonable time, except for a DEQ approved period between phases of a phased construction project.
- (9 VAC 5-80-110 and Condition # 88 of the February 9, 2001 State Operating Permit)

General Requirements:

105. The permittee shall furnish notification to the Piedmont Regional Office of malfunctions of the selective catalytic reduction equipment that may cause excess emissions of particulate emissions for more than one hour, by facsimile transmission, telephone or telegraph. Such notification shall be made as soon as practicable but not later than four daytime business hours of the malfunction. The permittee shall provide a written statement giving all pertinent facts, including the estimated duration of the breakdown, within 14 days of the occurrence. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the permittee shall notify Piedmont Regional Office in writing.
(9 VAC 5-80-110 and Condition # 89 of the February 9, 2001 State Operating Permit)

Records:

106. The permittee shall maintain records of emission data and operating parameters as necessary to demonstrate compliance with Conditions 93 to 105. The content and format of such records shall be arranged with the Piedmont Region. These records shall include, but are not limited to:

- a. Annual hours of operation of each selective catalytic reduction unit.
- b. Hours of operation of each selective catalytic reduction unit from May 1 to September 30 inclusive.
- c. Annual consumption of ammonia from each selective catalytic reduction unit.
- d. Nitrogen dioxide emissions from the facility during the time period May 1 to September 30 (inclusive).
- e. Nitrogen dioxide emissions from units 4, 5, and 6 during the time period May 1 to September 30 (inclusive).

These records shall be available for inspection by the DEQ and shall be current for the most recent five years.

(9 VAC 5-50-50, 9 VAC 5-40-50, 9 VAC 5-80-110 and Condition # 90 of the February 9, 2001 State Operating Permit)

IX. Facility Wide Conditions

A. Limitations

107. Total annual emissions from the operation of the four (4) coal fired boilers, two (2) combined cycle combustion turbines, two (2) emergency gas turbines, one (1) emergency generator, two (2) coal crushers, storage pile(s), eleven conveyors, one (1) rail car unloading system, and the flyash reutilization project shall not exceed the limits specified below:

TSP	6,465.5 tons/yr
PM10	6,383.5 tons/yr
SO2	156,764.6 tons/yr
NO2	37,565.6 tons/yr
CO	2,306.1 tons/yr
VOC	275.3 tons/yr
PB	3.0 tons/yr

*The emission estimates above are an overall emissions contribution and shall not be used as compliance standards.

(9 VAC 5-80-110 and Condition # 91 of the February 9, 2001 State Operating Permit)

108. Nitrogen oxide emissions from Virginia Power's Chesterfield Power Station, starting in the year 2000, shall not exceed 5,759 tons from June 1 to August 31 (inclusive) of each calendar year, except as provided in Condition 109 of this permit. Virginia Power will determine the actual NO_x emissions released from the Chesterfield Power Station from June 1 to August 31 of each calendar year. NO_x emissions, for emissions units required to operate continuous emissions monitors, shall be determined by continuous emission monitors, operated in accordance with the provisions of 40 CFR 60. For emissions units not required to operate continuous emissions monitors, AP-42 emissions factors, manufacturer's data, or stack testing data shall be used to calculate NO_x emissions. Virginia Power shall provide to the Department (Piedmont Regional Office, DEQ, 4949-A Cox Road, Glen Allen, Va 23060-5020) the calculated NO_x emissions and any supporting data that the Department may reasonably request, all information shall be received by the 15th of October of each calendar year, in order that the Department may verify that the agreed-upon limits are being met.

(9 VAC 5-80-110 and Condition # 92 of the February 9, 2001 State Operating Permit)

109. If Virginia Power demonstrates to the satisfaction of the Director, Piedmont Regional Office, of the Department of Environmental Quality, Virginia Power has caused a reduction in the emissions of any other source of NO_x in the Richmond Ozone Emissions Control Area to a level below that projected in the Maintenance Plan, the emissions limit for the Chesterfield Power Station may be increased by an equal amount. This condition applies to the emission limit in Condition 108 and to the combustion units and the fuel burning equipment located at the Chesterfield Power Station at the time of the issuance of this permit. Furthermore this condition does not supersede any applicable new source review or state implementation plan requirements.

(9 VAC 5-80-110 and Condition # 93 of the February 9, 2001 State Operating Permit)

110. The facility that this permit covers may be subject to the requirements of 9 VAC 5 Chapter 80, Article 5 of the Board's regulations. This requirement is under regulatory review and the provisions have been deferred. After this regulatory review has been completed, regional offices shall notify the facility of any appropriate action required.

(9 VAC 5-80-110 and Condition # 94 of the February 9, 2001 State Operating Permit)

111. Emissions shall be controlled by proper operation and maintenance of combustion equipment and air pollution control equipment. The permittee shall develop, maintain, and have available to all operators good written operating procedures and a maintenance schedule for Units 3, 4, 5, 6, 7, 8, the emergency combustion turbines, emergency diesel generator, coal handling equipment, flyash reutilization equipment and associated air pollution control equipment. A maintenance schedule for all such equipment shall be established and made available to the Director, Piedmont Regional Office for review. All records required by this condition shall be kept on site for the most current five (5) year period and made available for inspection by the DEQ.

(VAC 5-80-110 or as specified in previous permits of State Regulations and Condition # 95 of the February 9, 2001 State Operating Permit)

B. Monitoring and Recordkeeping

112. The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content of and format of such records shall be arranged with the Director, Piedmont Regional Office. These records shall include, but are not limited to:

- a. The monthly throughput of natural gas, the monthly throughput of distillate oil, the monthly throughput of coal, and
- b. All fuel supplier certifications, and
- c. Records of all oil and coal shipments purchased indicating the supplier, volume\weight of the shipment, and date on which the shipment was made, and all subsequent oil and coal analyses to include weight percent sulfur content, and
- d. The yearly throughput of flyash in tons, calculated as the sum of each consecutive 12 month period, and
- e. The yearly total usage of trucks, both vehicle miles traveled and number of trucks, for the flyash reutilization project, calculated as the sum of each consecutive 12 month period, and
- f. The yearly throughput of stabilization agent to the silo, calculated monthly as the sum of each consecutive 12 month period and

- g. The amount of water applied to the unpaved road ways. In addition Virginia Power shall provide the records and calculations need to determine compliance with condition 72b.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.

(9 VAC 5-80-110, 9 VAC 5-50-50 or as specified in previous permits of State Regulations and Condition # 96 of the February 9, 2001 State Operating Permit)

C. Testing

113. If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the following methods in accordance with procedures approved by the DEQ as follows:

The following table is only required for those pollutants that have emission limits.

Pollutant	Test Method (40 CFR Part 60, Appendix A)
VOC	EPA Methods 18, 25, 25a
VOC Content	EPA Methods 24, 24a
NO _x	EPA Method 7
SO ₂	EPA Method 6
CO	EPA Method 10
PM/PM-10	EPA Methods 5, 17
Visible Emission	EPA Method 9

(9 VAC 5-80-110)

X. Insignificant Emission Units

The following emission units at the facility are identified in the application as insignificant emission units under 9 VAC 5-80-720:

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9 VAC 5-80-720 B)	Rated Capacity (9 VAC 5-80-720 C)
IS-4	Natural Gas Heater	9 VAC 5-80-710 B	NO _x , CO, PM-10, SO ₂ , CO	6.86 X 10 ⁶ Btu/hr
IS-8	Gasoline Tank	9 VAC 5-80-710 B	VOC	5,000 gallons
IS-9	Gasoline Dispensing Station A and B	9 VAC 5-80-710 B	VOC	N/A
IS-10	Electro-Hydraulic Control (EHC) Systems	9 VAC 5-80-710 B	VOC	< 500 gallons

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9 VAC 5-80-720 B)	Rated Capacity (9 VAC 5-80-720 C)
IS-11	Kerosene Tank for Space Heating	9 VAC 5-80-710 B	VOC	504 gallons
IS-12	Fly Ash Sluicing System and Pond	9 VAC 5-80-710 B	TSP/PM10	N/A
IS-13	Parts Degreasers	9 VAC 5-80-710 B	VOC	= < 500 gallons
IS-14	Miscellaneous Fuel Oil Storage Tank	9 VAC 5-80-710 B	VOC	< 1,000 gallons
IS-15	Air Compressor Lube Oil System	9 VAC 5-80-710 C	VOC	< 1,000 gallons
IS-16	Air Preheater Lube Oil System	9 VAC 5-80-710 C	VOC	< 1,000 gallons
IS-17	Boiler Circulating Water Pump Lube Oil System	9 VAC 5-80-710 C	VOC	< 1,000 gallons
IS-18	Boiler Feed Water System Lube Oil Systems	9 VAC 5-80-710 C	VOC	< 1,000 gallons
IS-19	Forced Draft Fan Lube Oil System	9 VAC 5-80-710 C	VOC	< 1,000 gallons
IS-20	Induced Draft Fan Lube Oil System	9 VAC 5-80-710 C	VOC	< 1,000 gallons
IS-21	Generator Cooling Oil System	9 VAC 5-80-710 C	VOC	< 1,000 gallons
IS-22	Generator hydrogen seal system	9 VAC 5-80-710 C	VOC	< 1,000 gallons
IS-23	Unit 6 Primary Air Fan Lube Oil System	9 VAC 5-80-710 C	VOC	< 1,000 gallons
IS-24	Lube Oil Storage Tanks	9 VAC 5-80-710 B	VOC	=< 16, 000 gallons
IS-25	Lube Oil Storage Tanks	9 VAC 5-80-710 C	VOC	< 1,000 gallons
IS-26	Turbine Lube Oil Systems	9 VAC 5-80-710 B	VOC	< 7,500 gallons
IS-27	Coal Sampling System Hydraulic Oil Tank	9 VAC 5-80-710 C	VOC	60 gallons
IS-28	Natural Gas Drip Tank	9 VAC 5-80-710 B	VOC	< 500 gallons
IS-29	Coal Car Thaw Shed Propane Vaporizer	9 VAC 5-80-710 B	VOC	0.58 X 10 ⁶ Btu/hr
IS-30	Coal Car Thaw Shed	9 VAC 5-80-710 B	VOC	38.5 X 10 ⁶ Btu/hr
IS-31	Oil Sludge Tank	9 VAC 5-80-710 B	VOC	< 500 gallons

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9 VAC 5-80-720 B)	Rated Capacity (9 VAC 5-80-720 C)
IS-32	Waste Oil Tanks	9 VAC 5-80-710 B	VOC	60,000gallons and 2,800 gallons
IS-33	Propane Storage Tank	9 VAC 5-80-710 B	VOC	30,000 gallons
IS-37	Two (2) Ammonia Storage Tanks	9 VAC 5-80-710 B	VOC	45,000 gallons EACH

These emission units are presumed to be in compliance with all requirements of the federal Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping, or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110.

XI. Permit Shield & Inapplicable Requirements

Compliance with the provisions of this permit shall be deemed compliance with all applicable requirements in effect as of the permit issuance date as identified in this permit. This permit shield covers only those applicable requirements covered by terms and conditions in this permit and the following requirements which have been specifically identified as being not applicable to this permitted facility:

Citation	Title of Citation	Description of Applicability

Nothing in this permit shield shall alter the provisions of §303 of the federal Clean Air Act, including the authority of the administrator under that section, the liability of the owner for any violation of applicable requirements prior to or at the time of permit issuance, or the ability to obtain information by the administrator pursuant to §114 of the federal Clean Air Act, (ii) the Board pursuant to §10.1-1314 or §10.1-1315 of the Virginia Air Pollution Control Law or (iii) the Department pursuant to §10.1-1307.3 of the Virginia Air Pollution Control Law.
 (9 VAC 5-80-140)

XII. General Conditions

A. Federal Enforceability

All terms and conditions in this permit are enforceable by the administrator and citizens under the federal Clean Air Act, except those that have been designated as only state-enforceable.
 (9 VAC 5-80-110 N)

B. Permit Expiration

This permit has a fixed term of five years. The expiration date shall be the date five years from the date of issuance. Unless a timely and complete renewal application consistent, with 9 VAC 5-80-80, has been submitted, to the Department, by the owner, the right of the facility to operate shall be terminated upon permit expiration.

1. The owner shall submit an application for renewal at least six months but no earlier than eighteen months prior to the date of permit expiration.
2. If an applicant submits a timely and complete application for an initial permit or renewal under this section, the failure of the source to have a permit or the operation of the source without a permit shall not be a violation of Article 1, Part II of 9 VAC 5 Chapter 80, until the Board takes final action on the application under 9 VAC 5-80-150.
3. No source shall operate after the time that it is required to submit a timely and complete application under subsections C and D of 9 VAC 5-80-80 for a renewal permit, except in compliance with a permit issued under Article 1, Part II of 9 VAC 5 Chapter 80.
4. If an applicant submits a timely and complete application under section 9 VAC 5-80-80 for a permit renewal but the Board fails to issue or deny the renewal permit before the end of the term of the previous permit, (i) the previous permit shall not expire until the renewal permit has been issued or denied and (ii) all the terms and conditions of the previous permit, including any permit shield granted pursuant to 9 VAC 5-80-140, shall remain in effect from the date the application is determined to be complete until the renewal permit is issued or denied.
5. The protection under subsections F 1 and F 5 (ii) of section 9 VAC 5-80-80 F shall cease to apply if, subsequent to the completeness determination made pursuant section 9 VAC 5-80-80 D, the applicant fails to submit by the deadline specified in writing by the Board any additional information identified as being needed to process the application.

(9 VAC 5-80-80 B, C and F, 9 VAC 5-80-110 D and 9 VAC 5-80-170 B)

C. Recordkeeping and Reporting

1. All records of monitoring information maintained to demonstrate compliance with the terms and conditions of this permit shall contain, where applicable, the following:
 - a. The date, place as defined in the permit, and time of sampling or measurements.
 - b. The date(s) analyses were performed.
 - c. The company or entity that performed the analyses.
 - d. The analytical techniques or methods used.
 - e. The results of such analyses.
 - f. The operating conditions existing at the time of sampling or measurement.

(9 VAC 5-80-110 F)

2. Records of all monitoring data and support information shall be retained for at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

(9 VAC 5-80-110 F)

3. The permittee shall submit the results of monitoring contained in any applicable requirement to DEQ no later than **March 1** and **September 1** of each calendar year. This report must be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:

- a. The time period included in the report. The time periods to be addressed are January 1 to June 30 and July 1 to December 31.
- b. All deviations from permit requirements. For purposes of this permit, deviations include, but are not limited to:

(1) Exceedance of emissions limitations or operational restrictions;

(2) Excursions from control device operating parameter requirements, as documented by continuous emission monitoring, periodic monitoring, or compliance assurance monitoring which indicates an exceedance of emission limitations or operational restrictions; or,

(3) Failure to meet monitoring, recordkeeping, or reporting requirements contained in this permit.

- c. If there were no deviations from permit conditions during the time period, the permittee shall include a statement in the report that “no deviations from permit requirements occurred during this semi-annual reporting period.”

(9 VAC 5-80-110 F)

D. Annual Compliance Certification

Exclusive of any reporting required to assure compliance with the terms and conditions of this permit or as part of a schedule of compliance contained in this permit, the permittee shall submit to EPA and DEQ no later than **March 1** each calendar year a certification of compliance with all terms and conditions of this permit including emission limitation standards or work practices. The compliance certification shall comply with such additional requirements that may be specified pursuant to §114(a)(3) and §504(b) of the federal Clean Air Act. This certification shall be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:

1. The time period included in the certification. The time period to be addressed is January 1 to December 31.
2. The identification of each term or condition of the permit that is the basis of the certification.
3. The compliance status.
4. Whether compliance was continuous or intermittent, and if not continuous, documentation of each incident of non-compliance.
5. Consistent with subsection 9 VAC 5-80-110 E, the method or methods used for determining the compliance status of the source at the time of certification and over the reporting period.
6. Such other facts as the permit may require to determine the compliance status of the source.

One copy of the annual compliance certification shall be sent to EPA at the following address:

Clean Air Act Title V Compliance Certification (3AP00)
U. S. Environmental Protection Agency, Region III
1650 Arch Street
Philadelphia, PA 19103-2029.

(9 VAC 5-80-110 K.5)

E. Permit Deviation Reporting

The permittee shall notify the Director, Piedmont Region within four daytime business hours, after discovery of any deviations from permit requirements which may cause excess emissions for more than one hour, including those attributable to upset conditions as may be defined in this permit. In addition, within 14 days of the discovery, the permittee shall provide a written statement explaining the problem, any corrective actions or preventative measures taken, and the estimated duration of the permit deviation. The occurrence should also be reported in the next semi-annual compliance monitoring report pursuant to General Condition XII.C.3. of this permit.
(9 VAC 5-80-110 F.2 and 9 VAC 5-80-250)

F. Failure/Malfunction Reporting

In the event that any affected facility or related air pollution control equipment fails or malfunctions in such a manner that may cause excess emissions for more than one hour, the owner shall, as soon as practicable but no later than four daytime business hours, notify the Director, Piedmont Region by facsimile transmission, telephone or telegraph of such failure or malfunction and shall within two weeks provide a written statement giving all pertinent facts, including the estimated duration of the breakdown. Owners subject to the requirements of 9 VAC 5-40-50 C and 9 VAC 5-50-50 C are not required to provide the written statement prescribed in this paragraph for facilities subject to the monitoring requirements of 9 VAC 5-40-40 and 9 VAC 5-50-40. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the owner shall notify the Director, Piedmont Region.

1. The emission units that have continuous monitors subject to 9 VAC 5-40-50 C and 9 VAC 5-50-50 C are not subject to the two week written notification.
2. The emission units subject to the reporting and the procedure requirements of 9 VAC 5-40-50 C and the procedures of 9 VAC 5-50-50 C are as described in this permit.
3. Each owner required to install a continuous monitoring system subject to 9 VAC 5-40-41 or 9 VAC 5-50-410 shall submit a written report of excess emissions (as defined in the applicable emission standard) to the board for every calendar quarter. All quarterly reports shall be postmarked by the 30th day following the end of each calendar quarter and shall include the following information:
 - a. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h) or 9 VAC 5-40-41 B 6, any conversion factors used, and the date and time of commencement and completion of each period of excess emissions;
 - b. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the source. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted;

- c. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments; and
 - d. When no excess emissions have occurred or the continuous monitoring systems have not been inoperative, repaired or adjusted, such information shall be stated in the report.
4. All emission units not subject to 9 VAC 5-40-50 C and 9 VAC 5-50-50 C must make written reports within 14 days of the malfunction occurrence.

(9 VAC 5-20-180 C, [9 VAC 5-40-50, and 9 VAC 5-50-50)

G. Severability

The terms of this permit are severable. If any condition, requirement or portion of the permit is held invalid or inapplicable under any circumstance, such invalidity or inapplicability shall not affect or impair the remaining conditions, requirements, or portions of the permit.

(9 VAC 5-80-110 G.1)

H. Duty to Comply

The permittee shall comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the federal Clean Air Act or the Virginia Air Pollution Control Law or both and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or, for denial of a permit renewal application.

(9 VAC 5-80-110 G.2)

I. Need to Halt or Reduce Activity not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

(9 VAC 5-80-110 G.3)

J. Permit Action for Cause

1. This permit may be modified, revoked, reopened, and reissued, or terminated for cause as specified in 9 VAC 5-80-110 L, 9 VAC 5-80-240 and 9 VAC 5-80-260. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

(9 VAC 5-80-110 G & L, 9 VAC 5-80-240 and 9 VAC 5-80-260)

2. Such changes that may require a permit modification and/or revisions include, but are not limited to, the following:
 - a. Erection, fabrication, installation, addition, or modification of an emissions unit (which is the source, or part of it, which emits or has the potential to emit any regulated air pollutant), or of a source, where there is, or there is potential of, a resulting emissions increase;
 - b. Reconstruction or replacement of any emissions unit or components thereof such that its capital cost exceeds 50% of the cost of a whole new unit;
 - c. Any change at a source which causes emission of a pollutant not previously emitted, an increase in emissions, production, throughput, hours of operation, or fuel use greater than those allowed by the permit, or by 9 VAC 5-80-11, unless such an increase is authorized by an emissions cap; or any change at a source which causes an increase in emissions resulting from a reduction in control efficiency, unless such an increase is authorized by an emissions cap;
 - d. Any reduction of the height of a stack or of a point of emissions, or the addition of any obstruction which hinders the vertical motion of exhaust;
 - e. Any change at the source which affects its compliance with conditions in this permit, including conditions relating to monitoring, recordkeeping, and reporting;
 - f. Addition of an emissions unit which qualifies as insignificant by emissions rate (9 VAC 5-80-720 B) or by size or production rate (9 VAC 5-80-720 C);
 - g. Any change in insignificant activities, as defined by 9 VAC 5-80-90 D.1.a(1) and 9 VAC 5-80-720 B and 9 VAC 5-80-720 C.

(9 VAC 5-80-110 G, 9 VAC 5-80-110 J, 9 VAC 5-80-240, and 9 VAC 5-80-260)

K. Property Rights

The permit does not convey any property rights of any sort, or any exclusive privilege. (9 VAC 5-80-110 G.5)

L. Duty to Submit Information

1. The permittee shall furnish to the Board, within a reasonable time, any information that the Board may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Board copies of records required to be kept by the permit and, for information claimed to be confidential, the permittee shall furnish such records to the Board along

with a claim of confidentiality.
(9 VAC 5-80-110 G.6)

2. Any document (including reports) required in a permit condition to be submitted to the Board shall contain a certification by a responsible official that meets the requirements of 9 VAC 5-80-80 G.
(9 VAC 5-80-110 K.1)

M. Duty to Pay Permit Fees

The owner of any source for which a permit under 9 VAC 5-80-50 through 9 VAC 5-80-300 was issued shall pay permit fees consistent with the requirements of 9 VAC 5-80-310 through 9 VAC 5-80-350. The actual emissions covered by the permit program fees for the preceding year shall be calculated by the owner and submitted to the Department by April 15 of each year. The calculations and final amount of emissions are subject to verification and final determination by the Department.
(9 VAC 5-80-110 H and 9 VAC 5-80-340 C)

N. Fugitive Dust Emission Standards

During the operation of a stationary source or any other building, structure, facility, or installation, no owner or other person shall cause or permit any materials or property to be handled, transported, stored, used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions may include, but are not limited to, the following:

1. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of land;
2. Application of asphalt, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which may create airborne dust; the paving of roadways and the maintaining of them in a clean condition;
3. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty material. Adequate containment methods shall be employed during sandblasting or other similar operations;
4. Open equipment for conveying or transporting material likely to create objectionable air pollution when airborne shall be covered or treated in an equally effective manner at all times when in motion; and,

5. The prompt removal of spilled or tracked dirt or other materials from paved streets and of dried sediments resulting from soil erosion.

(9 VAC 5-40-90 and 9 VAC 5-50-90)

O. Startup, Shutdown, and Malfunction

At all times, including periods of startup, shutdown, soot blowing, and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Board, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

(9 VAC 5-50-20 E and 9 VAC 5-40-20 E)

P. Alternative Operating Scenarios

Contemporaneously with making a change between reasonably anticipated operating scenarios identified in this permit, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions under each such operating scenario. The terms and conditions of each such alternative scenario shall meet all applicable requirements including the requirements of 9 VAC 5 Chapter 80, Article 1.

(9 VAC 5-80-110 J)

Q. Inspection and Entry Requirements

The permittee shall allow DEQ, upon presentation of credentials and other documents as may be required by law, to perform the following: Enter upon the premises where the source is located or emissions-related activity is conducted, or where records must be kept under the terms and conditions of the permit.

1. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of the permit.
2. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit.
3. Sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

(9 VAC 5-80-110 K.2)

R. Reopening For Cause

The permit shall be reopened by the Board if additional federal requirements become applicable to a major source with a remaining permit term of three years or more. Such reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 9 VAC 5-80-80 F.

1. The permit shall be reopened if the Board or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
2. The permit shall be reopened if the administrator or the Board determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
3. The permit shall not be reopened by the Board if additional applicable state requirements become applicable to a major source prior to the expiration date established under 9 VAC 5-80-110 D.

(9 VAC 5-80-110 L)

S. Permit Availability

Within five days after receipt of the issued permit, the permittee shall maintain the permit on the premises for which the permit has been issued and shall make the permit immediately available to DEQ upon request.

(9 VAC 5-80-150 E)

T. Transfer of Permits

1. No person shall transfer a permit from one location to another, unless authorized under 9 VAC 5-80-130, or from one piece of equipment to another.
(9 VAC 5-80-160)
2. In the case of a transfer of ownership of a stationary source, the new owner shall comply with any current permit issued to the previous owner. The new owner shall notify the Board of the change in ownership within 30 days of the transfer and shall comply with the requirements of 9 VAC 5-80-200.
(9 VAC 5-80-160)
3. In the case of a name change of a stationary source, the owner shall comply with any current permit issued under the previous source name. The owner shall notify the

Board of the change in source name within 30 days of the name change and shall comply with the requirements of 9 VAC 5-80-200.
(9 VAC 5-80-160)

U. Malfunction as an Affirmative Defense

1. A malfunction constitutes an affirmative defense to an action brought for noncompliance with technology-based emission limitations if the requirements of paragraph 2 of this condition are met.
2. The affirmative defense of malfunction shall be demonstrated by the permittee through properly signed, contemporaneous operating logs, or other relevant evidence that show the following:
 - a. A malfunction occurred and the permittee can identify the cause or causes of the malfunction.
 - b. The permitted facility was at the time being properly operated.
 - c. During the period of the malfunction the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit.
 - d. The permittee notified the board of the malfunction within two working days following the time when the emission limitations were exceeded due to the malfunction. This notification shall include a description of the malfunction, any steps taken to mitigate emissions, and corrective actions taken. The notification may be delivered either orally or in writing. The notification may be delivered by electronic mail, facsimile transmission, telephone, or any other method that allows the permittee to comply with the deadline. This notification fulfills the requirements of 9 VAC 5-80-110 F 2 b to report promptly deviations from permit requirements. This notification does not release the permittee from the malfunction reporting requirement under 9 VAC 5-20-180 C.
3. In any enforcement proceeding, the permittee seeking to establish the occurrence of a malfunction shall have the burden of proof. The provisions of this section are in addition to any malfunction, emergency or upset provision contained in any requirement applicable to the source.
4. The provisions of this section are in addition to any malfunction, emergency or upset provision contained in any applicable requirement.

(9 VAC 5-80-250)

V. Permit Revocation or Termination for Cause

A permit may be revoked or terminated prior to its expiration date if the owner knowingly makes material misstatements in the permit application or any amendments thereto or if the permittee violates, fails, neglects or refuses to comply with the terms or conditions of the permit, any applicable requirements, or the applicable provisions of 9 VAC 5 Chapter 80 Article 1. The Board may suspend, under such conditions and for such period of time as the Board may prescribe, any permit for any of the grounds for revocation or termination or for any other violations of these regulations.
(9 VAC 5-80-260)

W. Duty to Supplement or Correct Application

Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrections. An applicant shall also provide additional information as necessary to address any requirements that become applicable to the source after the date a complete application was filed but prior to release of a draft permit.
(9 VAC 5-80-80 E)

X. Stratospheric Ozone Protection

If the permittee handles or emits one or more Class I or II substances subject to a standard promulgated under or established by Title VI (Stratospheric Ozone Protection) of the federal Clean Air Act, the permittee shall comply with all applicable sections of 40 CFR Part 82, Subparts A to F.
(40 CFR Part 82, Subparts A-F)

Y. Accidental Release Prevention

If the permittee has more, or will have more than a threshold quantity of a regulated substance in a process, as determined by 40 CFR 68.115, the permittee shall comply with the requirements of 40 CFR Part 68.
(40 CFR Part 68)

Z. Changes to Permits for Emissions Trading

No permit revision shall be required under any federally approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.
(9 VAC 5-80-110 I)

AA. Emissions Trading

Where the trading of emissions increases and decreases within the permitted facility is to occur within the context of this permit and to the extent that the regulations provide for trading such increases and decreases without a case-by-case approval of each emissions trade:

1. All terms and conditions required under 9 VAC 5-80-110, except subsection N, shall be included to determine compliance.
2. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions that allow such increases and decreases in emissions.
3. The owner shall meet all applicable requirements including the requirements of 9 VAC 5-80-50 through 9 VAC 5-80-300.

(9 VAC 5-80-110 I.2)

BB. Operational Flexibility

The provisions of 9 VAC 5-80-280 regarding operational flexibility apply.
(9 VAC 5-80-280)

XIII. State-Only Enforceable Requirements

The following terms and conditions are not required under the federal Clean Air Act or under any of its applicable federal requirements, and are not subject to the requirements of 9 VAC 5-80-290 concerning review of proposed permits by EPA and draft permits by affected states.

1. Odor (9 VAC 5 Chapter 40, Article 2)
2. State toxics rule (9 VAC 5 Chapter 60)

(9 VAC 5-80-110 N and 9 VAC 5-80-300)

XIV. Phase II Acid Rain Allowances and Requirements

The attached Phase II Acid Rain permit is incorporated into this permit by reference. The owners and operators of the source shall comply with the standard requirements and special provisions set for h in the applications.
(9 VAC 5-80-440, 9 VAC 5-80-490)

XV. NO_x Allowance Budget Trading Permit Requirements

A. General Conditions

1. A review of the air emission units included in this permit approval has determined that the equipment listed in the following table meets the definition of a NO_x Budget Unit and is subject to the NO_x Budget emission limitations under 9 VAC 5-140-40, or for opt-in sources 9 VAC 5-140-800. As required by 9 VAC 5-140-200 A for each NO_x Budget source required to have a federally enforceable permit, such permit will include the NO_x Allowance Budget Trading permit to be administered by the permitting authority. This section represents the NO_x Budget Trading permit.
(9 VAC 5-140-40)
2. The NO_x Budget Trading permit will be administrated by the DEQ under the authority of 9 VAC 5 Chapter 80, Part II, Articles 1 and 3 (9 VAC 5-80-50 et seq. and 9 VAC 5-80-360 et seq.), and 9 VAC 5 Chapter 140, Part I (9 VAC 5-140-10 et seq.).
(9 VAC 5-140-10)
3. The following air emission units have been determined to meet the applicability requirements as provided in 9 VAC 5-140-40 A.1 and A.2. Units that do not meet this definition, are not defined as 25-Ton Exemption Units and are not permanently shutdown can be included in the NO_x Budget Trading program as “opt-in” air emission sources.
(9 VAC 5-140-40 A)

Table Error! Reference source not found. – 1 Facility NO _x Budget Units				
Facility Unit ID	NATS Account ID	Unit Name and description	Size / Rate Heat Capacity* (MMBtu/hr)	Size / Rated Generation Capacity* (megawatts)
3	003797000003	Combustion Engineering Tangentially Fired Boiler / 1952	1155	112
4	003797000004	Combustion Engineering Tangentially Fired Boiler / 1960	1761	187
5	003797000005	Combustion Engineering Tangentially Fired Boiler / 1964	3604	359
6	003797000006	Combustion Engineering Tangentially Fired Boiler / 1969	6650	694
7	003797000007	General Electric STAG 107 Combustion Turbine / 1990	1980	238
8A	003797000008A	General Electric STAG 107 Combustion Turbine / 1992	1980.4	241

* The size / rated capacity is provided for informational purposes only, and is not an applicable requirement.

4. This NO_x Budget Trading permit will become effective on May 31, 2004.
(9 VAC 5-140-240.1)

B. Standard Requirements

1. Monitoring requirements.

- a. The owners and operators and, to the extent applicable, the NO_x authorized account representative of each NO_x Budget source and each NO_x Budget unit at the source shall comply with the monitoring requirements of Part I, Article 8 (9 VAC 5-140-700 et seq.).
(9 VAC 5-140-60 B.1)
- b. The emissions measurements recorded and reported in accordance with (9 VAC 5-140-700 et seq.) (Subpart H of 40 CFR Part 97) shall be used to determine compliance by the unit with the NO_x Budget emissions limitation under paragraphs B.2.a through B.2.h.
(9 VAC 5-140-60 B.2)

Pollutant or Stack Parameter	CEM Monitoring Methods 40 CFR 75
NO _x Concentration	75.12
CO ₂ / Diluent Gas	75.10 (a) (2)
Stack Gas Velocity / Flow	75.11
Moisture	75.12 (b)

2. Nitrogen oxides requirements.

- a. The owners and operators of each NO_x Budget source and each NO_x Budget unit at the source shall hold NO_x allowances available for compliance deductions under 9 VAC 5-140-540 A, B, E, or F, as of the NO_x allowance transfer deadline, in the unit's compliance account and the source's overdraft account in an amount not less than the total NO_x emissions for the control period from the unit, as determined in accordance with Part I, Article 8 (9 VAC 5-140-700 et seq.), plus any amount necessary to account for actual utilization under 9 VAC 5-140-420 E for the control period or to account for excess emissions for a prior control period under 9 VAC 5-140-540 D or to account for withdrawal from the NO_x Budget Trading Program, or a change in regulatory status, of a NO_x Budget opt-in unit under 9 VAC 5-140-860 or 9 VAC 5-140-870.
(9 VAC 5-140-60 C.1)

- b. Each ton of nitrogen oxides emitted in excess of the NO_x Budget emissions limitation shall constitute a separate violation of 9 VAC 5 Chapter 140, Part I, the Clean Air Act, and applicable Virginia Air Pollution law.
(9 VAC 5-140-60 C.2)
- c. A NO_x Budget unit shall be subject to the requirements under 9 VAC 5-140-60 C.1 starting on the later of May 31, 2004, or the date on which the unit commences operation.
(9 VAC 5-140-60 C.3)
- d. NO_x allowances shall be held in, deducted from, or transferred among NO_x Allowance Tracking System accounts in accordance with Part I, Article 5 (9 VAC 5-140-400 et seq.), Article 6 (9 VAC 5-140-500 et seq.), Article 7 (9 VAC 5-140-600 et seq.), and Article 9 (9 VAC 5-140-800 et seq.).
(9 VAC 5-140-60 C.4)
- e. A NO_x allowance shall not be deducted, in order to comply with the requirements under 9 VAC 5-140-60 C.1 for a control period in a year prior to the year for which the NO_x allowance was allocated.
(9 VAC 5-140-60 C.5)
- f. A NO_x allowance allocated by the permitting authority or the administrator under the NO_x Budget Trading Program is a limited authorization to emit one ton of nitrogen oxides in accordance with the NO_x Budget Trading Program. No provision of the NO_x Budget Trading Program, the NO_x Budget permit application, the NO_x Budget permit, or an exemption under 9 VAC 5-140-50 and no provision of law shall be construed to limit the authority of the United States or the State to terminate or limit such authorization.
(9 VAC 5-140-60 C.6)
- g. A NO_x allowance allocated by the permitting authority or the administrator under the NO_x Budget Trading Program does not constitute a property right.
(9 VAC 5-140-60 C.7)
- h. Upon recordation by the administrator under Part I, Article 6 (9 VAC 5-140-500 et seq.), Article 7 (9 VAC 5-140-600 et seq.), or Article 9 (9 VAC 5-140-800 et seq.), every allocation, transfer, or deduction of a NO_x allowance to or from a NO_x Budget unit's compliance account or the overdraft account of the source where the unit is located is deemed to amend automatically, and become a part of, any NO_x Budget permit of the NO_x Budget unit by operation of law without any further review.
(9 VAC 5-140-60 C.8)

3. Excess emissions requirements.

- a. The owners and operators of a NO_x Budget unit that has excess emissions in any control period shall:
 - (1) Surrender the NO_x allowances required for deduction under 9 VAC 5-140-540 D 1; and
 - (2) Pay any fine, penalty, or assessment or comply with any other remedy imposed under 9 VAC 5-140-540 D 3.
- (9 VAC 5-140-60 D)

C. Recordkeeping and Reporting Requirements.

The following requirements concerning recordkeeping and reporting shall apply:

- 1. Unless otherwise provided, the owners and operators of the NO_x Budget source and each NO_x Budget unit at the source shall keep on site at the source each of the following documents for a period of five years from the date the document is created. This period may be extended for cause, at any time prior to the end of five years, in writing by the permitting authority or the administrator.

(9 VAC 5-140-60 E.1)

 - a. The account certificate of representation for the NO_x authorized account representative for the source and each NO_x Budget unit at the source and all documents that demonstrate the truth of the statements in the account certificate of representation, in accordance with 9 VAC 5-140-130; provided that the certificate and documents shall be retained on site at the source beyond such five-year period until such documents are superseded because of the submission of a new account certificate of representation changing the NO_x authorized account representative.

(9 VAC 5-140-60 E.1)
 - b. All emissions monitoring information, in accordance with Part I, Article 8 (9 VAC 5-140-700 et seq.), provided that to the extent that Part I, Article 8 (9 VAC 5-140-700 et seq.) provides for a three-year period for recordkeeping, the three-year period shall apply.

(9 VAC 5-140-60 E.1)
 - c. Copies of all reports, compliance certifications, and other submissions and all records made or required under the NO_x Budget Trading Program.

(9 VAC 5-140-60 E.1)

- d. Copies of all documents used to complete a NO_x Budget permit application and any other submission under the NO_x Budget Trading Program or to demonstrate compliance with the requirements of the NO_x Budget Trading Program.
(9 VAC 5-140-60 E.1)
2. The NO_x authorized account representative of a NO_x Budget source and each NO_x Budget unit at the source shall submit the reports and compliance certifications required under the NO_x Budget Trading Program, including those under Part I, Article 4 (9 VAC 5-140-300 et seq.), Article 8 (9 VAC 5-140-700 et seq.), or Article 9 (9 VAC 5-140-800 et seq.).
(9 VAC 5-140-60 E.1)

D. Testing

The permitted facility shall be constructed so as to allow for emissions testing at any time using appropriate methods. Upon request from the Department, test ports will be provided at the appropriate locations.

(9 VAC 5-50-30 and 9 VAC 5-140-300)

E. Liability

1. Any person who knowingly violates any requirement or prohibition of the NO_x Budget Trading Program, a NO_x Budget permit, or an exemption under 9 VAC 5-140-50 shall be subject to enforcement pursuant to applicable State or Federal law.
(9 VAC 5-140-60 F.1)
2. Any person who knowingly makes a false material statement in any record, submission, or report under the NO_x Budget Trading Program shall be subject to criminal enforcement pursuant to the applicable State or Federal law.
(9 VAC 5-140-60 F.2)
3. No permit revision shall excuse any violation of the requirements of the NO_x Budget Trading Program that occurs prior to the date that the revision takes effect.
(9 VAC 5-140-60 F.3)
4. Each NO_x Budget source and each NO_x Budget unit shall meet the requirements of the NO_x Budget Trading Program.
(9 VAC 5-140-100 F.4)
5. Any provision of the NO_x Budget Trading Program that applies to a NO_x Budget source or the NO_x authorized account representative of a NO_x Budget source shall also apply to the owners and operators of such source and of the NO_x Budget units at the source.
(9 VAC 5-140-60 F.5)

6. Any provision of the NO_x Budget Trading Program that applies to a NO_x Budget unit or the NO_x authorized account representative of a NO_x budget unit shall also apply to the owners and operators of such unit. Except with regard to the requirements applicable to units with a common stack under Article 8 (9 VAC 5-140-700 et seq.), the owners and operators and the NO_x authorized account representative of one NO_x Budget unit shall not be liable for any violation by any other NO_x Budget unit of which they are not owners or operators or the NO_x authorized account representative and that is located at a source of which they are not owners or operators or the NO_x authorized account representative.

(9 VAC 5-140-60 F.6)

F. Effect on Other Authorities.

No provision of the NO_x Budget Trading Program, a NO_x Budget permit application, a NO_x Budget permit, or an exemption under 9 VAC 5-140-50 shall be construed as exempting or excluding the owners and operators and, to the extent applicable, the NO_x authorized account representative of a NO_x Budget source or NO_x Budget unit from compliance with any other provision of the applicable, approved State implementation plan, a federally enforceable permit, the Clean Air Act.

(9 VAC 5-140-60 G)